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WARP PROJECT

WASTE AND RECYCLING PRACTICES FOR DUAL TRANSITION IN VOCATIONAL EDUCATION

PROJECT NUMBER
101183410

Deliverable D2.2 WARP OERs

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Executive Summary

The present deliverable documents the development of the WARP Open Educational Resources (OERs), produced within the framework of Work Package 2 (Capacity Building Intervention Development). The WARP OERs constitute the educational core of the project's capacity-building intervention, providing freely accessible, multilingual learning resources designed to support the professional development of Vocational Education and Training (VET) educators in the fields of sustainable waste management, circular economy, digital transformation and innovative pedagogical practices.

Developed in alignment with the WARP objectives, the educational resources comprise 16 learning units organised into four thematic learning pathways, each addressing the specific needs of distinct target groups, including new VET trainers, experienced VET trainers, VET educational designers and professionals seeking continuous development. The resources have been designed following Open Educational Resources principles, allowing unrestricted access, reuse and adaptation while ensuring consistency, pedagogical quality and accessibility across all partner languages (AL, EL, and ES).

The OERs are delivered through the WARP Virtual Learning Space (https://vle.warp-project.eu/), where learners are provided with structured learning materials, multimedia content, practical examples, assessment activities and complementary educational resources within a self-paced learning environment. The platform also supports collaborative learning through integrated communication and community features, contributing to continuous professional development beyond the completion of the training programme.

This deliverable presents the overall educational framework adopted during the development process, the pedagogical principles guiding the instructional design, the structure and organisation of the learning resources, their technical implementation within the Virtual Learning Space, and the quality considerations applied throughout their production. It further describes the individual learning units, their learning objectives, educational components and assessment approach, providing a comprehensive overview of the complete WARP Open Educational Resources portfolio.

The document is organised into a series of sections that progressively introduce the educational intervention. Following this Executive Summary, Section 2 outlines the objectives of the WARP Open Educational Resources and their role within the project's capacity-building strategy. Section 3 presents the four target groups addressed by the educational intervention, describing the specific learning needs of each learner profile. Section 4 introduces the educational framework underpinning the OERs, including the pedagogical

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principles, instructional design methodology and learning philosophy adopted throughout the development process.

Section 5 describes the overall structure of the WARP Open Educational Resources, covering the development methodology, organisation of the learning units, educational components, assessment strategy and quality assurance procedures applied during content production. Sections 6 and 7 present the accessibility and multilingual approaches implemented to ensure inclusive participation and broad usability across the consortium countries.

The core of the deliverable is presented in Section 8, which provides a comprehensive overview of the complete WARP Open Educational Resources portfolio. It introduces the common module structure before presenting the 16 learning modules organised into four learning pathways, corresponding to the project's four target groups: New VET Trainers, Seasoned VET Trainers, VET Educational Designers and Professionals in Continuous Development. Finally, Section 9 outlines future updates foreseen for the educational resources, while Section 10 concludes the deliverable by summarising its overall contribution to the WARP project and its long-term sustainability.

Table 1 Table of abbreviations

Abbreviation	***Definition***
AI	Artificial Intelligence
CE	Circular Economy
CoP	Community of Practice
ECTS	European Credit Transfer and Accumulation System
ECVET	European Credit System for Vocational Education and Training
EQAVET	European Quality Assurance Reference Framework for Vocational Education and Training
EQF	European Qualifications Framework
ESCO	European Skills, Competences, Qualifications and Occupations
ETF	European Training Foundation
EU	European Union
ILO	International Labour Organization
IPA III	Instrument for Pre-Accession Assistance III
JSC	Jobs and Skills Council
LMI	Labour Market Intelligence
MBT	Mechanical Biological Treatment

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Abbreviation	*Definition*
MRF	Material Recovery Facility
OECD	Organisation for Economic Co-operation and Development
OER	Open Educational Resources
PPE	Personal Protective Equipment
RCC	Regional Cooperation Council
RPL	Recognition of Prior Learning
SDGs	Sustainable Development Goals
TVET	Technical and Vocational Education and Training
UMW	Unsorted Municipal Waste
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
VR	Virtual Reality
WARP	Waste and Recycling Practices for the Green and Digital Transition in Vocational Education and Training
WBL	Work-Based Learning
WP	Work Package

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1. Introduction

The WARP project aims to strengthen the capacity of Vocational Education and Training (VET) providers by developing innovative educational resources and professional development opportunities focused on sustainable waste management, environmental responsibility and the green and digital transition. As part of this objective, Work Package 2 focuses on the development of a comprehensive capacity-building intervention that combines modern pedagogical methodologies with digital learning technologies to support the continuous upskilling of VET educators.

Within this framework, Deliverable D2.2 documents the implementation of Task 2.2 – WARP Open Educational Resources (OERs). Building upon the findings of the project's Needs Analysis presented in Section 1.2 of the Grant Agreement, which identified the educational priorities, competency gaps and learner profiles addressed by the WARP intervention, the task involved the identification and curation of relevant educational resources, the development of new learning materials aligned with the WARP curriculum, and the organisation of these resources into a coherent multilingual educational portfolio. The resulting educational content comprises sixteen learning units organised into four learning pathways, each corresponding to one of the learner profiles defined through the needs analysis and addressing thematic areas related to sustainable waste management, circular economy, digital education, pedagogical innovation and continuous professional development.

To ensure consistency across the consortium, ReadLab developed the common OER authoring templates and provided methodological guidance for the development, organisation and integration of the educational materials. Upon completion of the content development phase, ReadLab transformed the learning materials into interactive digital resources using Articulate Rise, preserving a common instructional structure and user experience across all modules. The resources were subsequently localised into the partner languages and integrated into the WARP Virtual Learning Space, where they were published as openly accessible learning materials within a unified multilingual learning environment available at https://vle.warp-project.eu/.

The WARP Virtual Learning Space serves as the central access point to the project's digital learning ecosystem, enabling participants to access learning materials, complete interactive assessment activities, explore complementary multimedia resources and engage in self-paced learning through an intuitive and accessible interface. Developed on the Moodle Learning Management System, the platform ensures a consistent user experience

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across all partner languages while supporting accessibility, responsive design and compatibility with a wide range of devices.

The following chapters document the implementation of Task 2.2 by presenting the methodology followed for the identification, development, digital transformation, localisation and publication of the WARP Open Educational Resources, together with the pedagogical framework, instructional design principles, organisational structure and quality assurance measures adopted throughout the development process.

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2. Objectives

The WARP Open Educational Resources (OERs) have been developed to support the implementation of the WARP capacity-building intervention by providing high-quality, openly accessible educational materials tailored to the professional development needs of Vocational Education and Training (VET) educators. As foreseen in Task 2.2 of the Grant Agreement, the OERs form an integral component of the WARP Virtual Learning Space, where they support flexible, self-paced learning while promoting the adoption of innovative teaching methodologies and sustainable waste management practices.

More specifically, the WARP OERs pursue the following objectives:

- To develop a comprehensive portfolio of educational resources supporting the sixteen learning units of the WARP curriculum through the adaptation and integration of relevant existing educational resources together with the creation of new learning materials addressing the specific objectives of the WARP capacity-building intervention.
- To provide learning materials in multiple educational formats, including readings, tutorials, videos and interactive learning activities, accommodating different learning preferences and supporting learner engagement.
- To strengthen the knowledge and competences of VET educators in sustainable waste management, circular economy principles, digital transformation, environmental education and horizontal skills relevant to vocational education.
- To promote the integration of digital tools, innovative pedagogical approaches and learner-centred methodologies within vocational education through structured and reusable educational content.
- To ensure that all educational resources are openly accessible, properly licensed for free use, and developed in formats that facilitate their future adaptation, reuse and localisation by VET trainers and educational organisations.
- To support multilingual implementation by providing educational resources that can be translated and contextualised for all partner countries, ensuring equitable access to learning opportunities across the consortium.
- To organise and publish the complete portfolio of OERs through the WARP Virtual Learning Space, enabling easy access, usability and knowledge exchange within the project's Virtual Collaboration and Training Space.
- To establish a coherent educational framework capable of supporting knowledge transfer, institutional capacity building and the long-term sustainability of the WARP training programme.

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Collectively, these objectives contribute to the broader ambition of the WARP project to enhance the quality, relevance and innovation capacity of vocational education through the promotion of sustainable practices and digital transformation.

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3. Target Groups

The WARP Open Educational Resources have been designed to respond to the diverse educational needs identified during the project's needs analysis while remaining fully aligned with the educational methodology presented in the Grant Agreement. As described in the Technical Description – Part B (p. 13), the WARP methodology combines a Virtual Learning Environment with Open Educational Resources supporting sixteen educational modules, organised around four learner profiles: newcomer VET trainers, VET trainers, VET designers and professional development VET trainers. The educational resources presented in this deliverable implement this original educational architecture by preserving the same learner profiles and the complete set of sixteen learning modules proposed in the Grant Agreement, while transforming them into multilingual Open Educational Resources delivered through the WARP Virtual Learning Space.

3.1. New VET Trainers

This learning pathway supports professionals entering the VET sector or those with limited teaching experience in environmental and sustainability-related subjects. The educational resources introduce the fundamental concepts of sustainable waste management, digital learning tools, green practices and leadership skills, providing participants with the knowledge required to confidently deliver modern vocational education.

3.2. Seasoned VET Trainers

The second pathway addresses the needs of experienced VET educators seeking to further strengthen their pedagogical and technical competences. The learning units focus on advanced teaching methodologies, technological innovations in waste management, project-based and work-based learning, assessment strategies and the integration of circular economy principles into vocational education.

3.3. VET Educational Designers

This pathway is intended for curriculum developers, instructional designers and educational coordinators responsible for planning, developing and evaluating vocational learning programmes. The learning resources support the design of modern curricula aligned with sustainability principles, the incorporation of global sustainability goals and the development of effective approaches for evaluating environmental learning outcomes.

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3.4. Professionals in Continuous Development

Recognising that professional learning extends beyond formal training, the final pathway supports educators engaged in lifelong professional development. The resources focus on continuous development techniques, labour market awareness, entrepreneurship, innovation and the ability to respond to evolving educational and industry requirements, enabling participants to maintain relevant and future-oriented professional competences.

Together, these four learning pathways form an integrated educational framework that accommodates different levels of professional experience while promoting a shared understanding of sustainable waste management, innovative pedagogy and the green and digital transition across the VET sector.

Target	WARP Module
New VET Trainers	1. Introduction to Sustainable Waste Management 2. Digital Tools for Environmental Learning 3. Understanding Green Practices in VET 4. Developing Leadership Skills for Sustainable Education
Seasoned VET Trainers	5. Technological Innovations in Waste Management 6. Assessment Strategies for Environmental Education 7. Project-Based Learning in Waste Management 8. Work based learning in waste management 9. Pedagogical Approaches for Teaching Sustainability 10. Integrating Circular Economy Concepts into VET
VET Educational Designers	11. Curriculum Development for Waste Management Education 12. Integrating Global Sustainability Goals into VET 13. Evaluating and Assessing Environmental Learning Outcomes
Professional Development VET trainers	14. Continuous development techniques 15. Interpreting Industry and Market Trends 16. Entrepreneurship and Innovation

Figure 1 WARP Modules per Target Group

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4. Educational Framework

The development of the WARP Open Educational Resources was guided by an educational framework designed to support the professional development of Vocational Education and Training (VET) educators through flexible, practice-oriented and learner-centred learning experiences. Building upon the intervention methodology established during the initial phase of the project, the educational framework combines modern pedagogical practices with digital learning technologies to create an accessible and coherent learning ecosystem capable of responding to the evolving needs of the VET sector.

The framework places equal emphasis on the acquisition of technical knowledge, the development of pedagogical competences and the application of learning within authentic professional contexts. Rather than presenting isolated educational materials, the WARP OERs have been structured as interconnected learning resources that progressively support learners throughout their professional development journey. Their design reflects the project's commitment to sustainability, innovation, lifelong learning and alignment with labour market requirements, while promoting collaboration, knowledge sharing and continuous professional improvement.

To achieve these objectives, the educational framework is built upon a number of complementary instructional principles that collectively define the organisation, delivery and educational value of the WARP learning resources.

4.1. Learner-Centred Professional Development

The educational resources have been designed around the professional profiles and learning needs identified during the project's intervention design process. Instead of adopting a uniform learning pathway, the curriculum distinguishes between different categories of VET professionals, allowing learners to engage with content that reflects their level of experience, professional responsibilities and expected competences.
This learner-centred approach supports meaningful professional development by ensuring that educational content remains relevant, applicable and adaptable to diverse educational contexts while encouraging participants to progressively strengthen both their technical expertise and their pedagogical practice.

4.2. Flexible and Self-Paced Learning

The WARP educational framework promotes flexible learning by allowing participants to

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access educational resources independently and progress through the learning units according to their own pace and professional availability. The integration of the Open Educational Resources within the Virtual Learning Space enables participants to organise their learning experience autonomously while maintaining a structured progression throughout the curriculum.
This flexibility supports lifelong learning by accommodating professionals with different schedules, educational backgrounds and training needs, making the learning experience more inclusive and accessible.

4.3. Modular Learning Structure

The educational content has been organised into independent yet interconnected learning units that collectively form a coherent curriculum. Each module addresses a specific thematic area while contributing to the broader educational objectives of the project, allowing participants to develop specialised competences without losing the continuity of the overall learning pathway.
The modular organisation also facilitates future updating, adaptation and reuse of individual learning units, supporting the long-term sustainability and scalability of the educational resources.

4.4. Practice-Oriented Learning

The educational framework emphasises the practical application of knowledge through authentic learning experiences that connect theoretical concepts with real-world vocational practice. Practical examples, applied activities and assessment exercises encourage learners to reflect on realistic professional situations and translate newly acquired knowledge into their own educational environments.
By promoting active engagement rather than passive content consumption, the learning resources support the development of practical competences that are directly applicable within vocational education and sustainable waste management contexts.

4.5. Continuous Professional Development

Professional learning within WARP is conceived as an ongoing process extending beyond the completion of individual learning units. The educational framework therefore encourages continuous competence development by supporting reflective practice, lifelong learning and the regular updating of professional knowledge in response to technological developments, evolving pedagogical approaches and labour market needs.
This perspective aligns with the broader intervention strategy developed within the project, which promotes continuous improvement, adaptability and long-term professional

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growth for VET educators.

4.6. Open Education and Knowledge Sharing

Consistent with the principles of Open Educational Resources (OER), the WARP learning materials have been developed to maximise accessibility, reuse and dissemination among educators, training providers and relevant stakeholders. The Grant Agreement originally envisaged the publication of the WARP Open Educational Resources under the Creative Commons Attribution–NonCommercial–ShareAlike 3.0 (CC BY-NC-SA 3.0) licence. During the final Transnational Project Meeting held in Kosovo, the consortium reviewed the licensing approach and unanimously agreed to adopt the more recent Creative Commons Attribution–NonCommercial 4.0 International (CC BY-NC 4.0) licence. This decision was taken to align the project with the current Creative Commons licensing framework, provide greater international interoperability and legal clarity, and ensure that the WARP educational resources are distributed under a licence that better reflects contemporary Open Educational Resources practices while preserving their open and non-commercial character.

As such, to encourage the broad use of the educational resources while protecting the integrity of the original work, all WARP OERs are published under the Creative Commons Attribution–NonCommercial 4.0 International (CC BY-NC 4.0) licence. This licence permits users to copy, distribute, adapt and build upon the materials for non-commercial purposes, provided appropriate attribution is given to the original creators and any modifications are clearly indicated.

The publication of the educational resources under the CC BY-NC 4.0 licence promotes knowledge sharing and facilitates their adaptation to different educational contexts, supporting their reuse by VET educators, training organisations and other stakeholders beyond the WARP consortium. Their integration within the WARP Virtual Learning Space further enhances accessibility by providing a centralised digital environment where users can access multilingual learning materials, engage with the educational content and benefit from a coherent learning experience.

Through this open education approach, the WARP educational framework contributes to the long-term sustainability of the project's results by encouraging the continuous use, adaptation and dissemination of the developed educational resources beyond the project's lifetime, while fostering collaboration and the exchange of good practices across the vocational education community.

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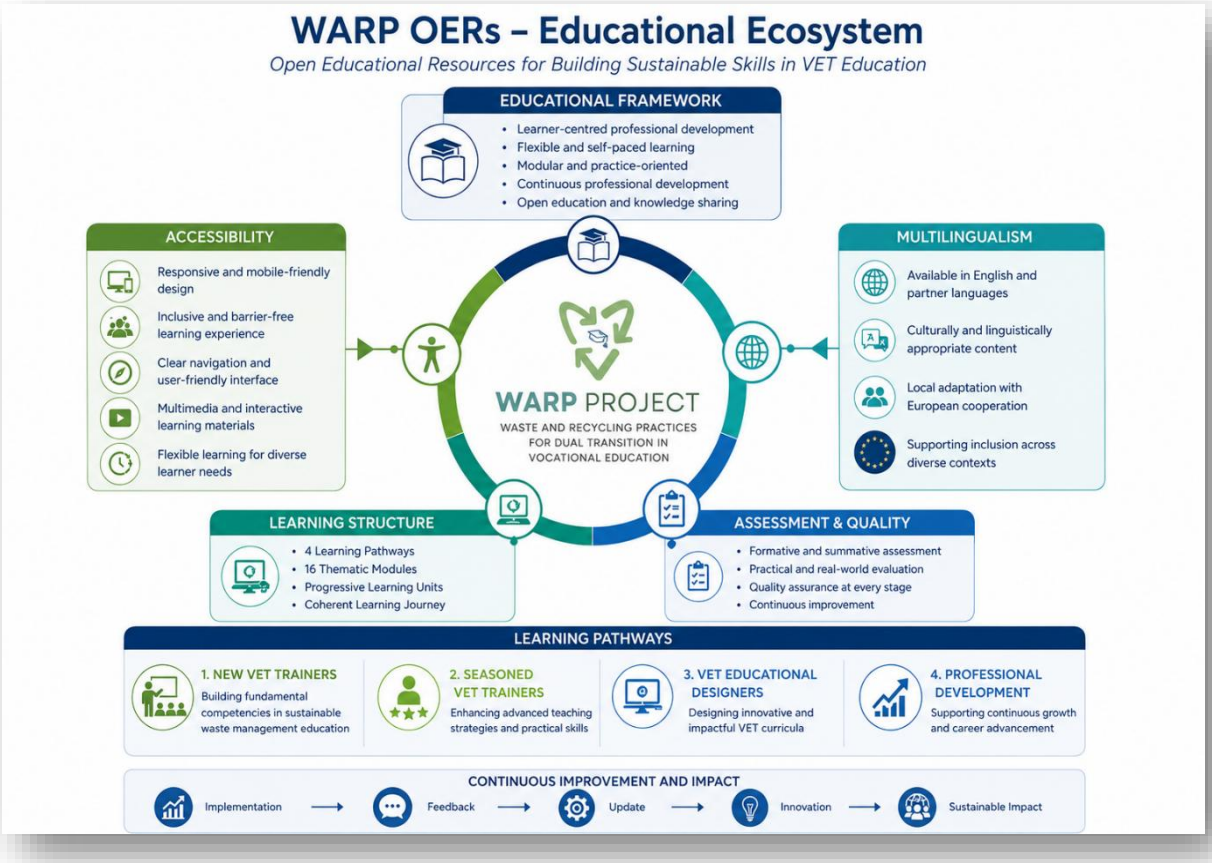


Figure 2 WARP Educational Ecosystem

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5. Structure of the WARP Open Educational Resources

The WARP Open Educational Resources have been designed as a structured and coherent educational portfolio supporting the implementation of the WARP capacity-building intervention. Rather than functioning as independent learning materials, the resources collectively form an integrated learning environment that enables Vocational Education and Training (VET) educators to progressively develop the knowledge, competences and practical skills required to address contemporary challenges related to sustainable waste management, circular economy and innovative vocational education.

The educational portfolio is organised according to the intervention framework developed during the project, ensuring that learning content responds to the different professional profiles identified through the needs analysis. The resources are distributed across four learning pathways, each addressing a distinct target group, while maintaining a common instructional philosophy and consistent learning experience throughout the programme.

To support flexible and autonomous learning, all educational resources follow a unified organisational structure. Each learning unit has been developed according to common instructional principles, allowing participants to navigate the educational content intuitively while progressively building their knowledge through complementary learning materials, practical activities and assessment opportunities. This consistency also facilitates multilingual implementation and contributes to the long-term sustainability, maintenance and future expansion of the educational resources.

5.1. OER Development Methodology

The development of the WARP Open Educational Resources followed a structured and collaborative methodology designed to ensure consistency across the educational portfolio while accommodating contributions from all consortium partners. The methodology combined the identification and adaptation of relevant educational resources, the development of new educational content, the production of interactive digital learning materials and their integration into the WARP Virtual Learning Space, resulting in a coherent multilingual OER portfolio aligned with the objectives of Task 2.2.

The development process was initiated in Project Month 11 (November 2025), when ReadLab, acting as the technical and post-production leader for the WARP Open Educa-

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tional Resources, distributed standardised content templates and comprehensive authoring guidelines to all consortium partners. These templates established a common instructional structure for every learning unit, enabling partners to familiarise themselves with the expected organisation of the educational content while ensuring a harmonised approach throughout the development process. ReadLab also provided continuous methodological and technical guidance to partners during the preparation of the educational materials, ensuring consistency in structure, instructional design and content organisation across all learning units.

The instructional level, scope and complexity of the educational materials were defined according to the characteristics and learning needs of the four target groups identified through the project's needs analysis and subsequently translated into the pedagogical framework established by the WARP Intervention Programme Plan (Deliverable D1.2). This learner-centred framework guided the development of the Open Educational Resources, ensuring that each learning pathway addressed the professional profile, prior experience and expected competences of its intended audience while maintaining consistency across the overall curriculum.

Following the establishment of the common instructional framework, responsibility for the development of the source educational content was allocated among consortium partners. Two organisations were assigned to each target group, allowing partners to collaborate on the preparation of the corresponding learning units while ensuring thematic coherence within each learning pathway. Depending on the subject matter, the educational materials combined adapted and contextualised existing resources with newly developed content specifically produced to address the learning objectives of the WARP curriculum.

Upon completion of the authoring phase, ReadLab coordinated the consolidation of the educational materials and transformed the source content into interactive Open Educational Resources using Articulate Rise. This post-production process included the application of a common instructional structure, the incorporation of multimedia and interactive learning elements, the organisation of assessment activities and the preparation of the materials for multilingual implementation. The completed OERs were subsequently integrated into the WARP Virtual Learning Space, developed on Moodle, where they were organised according to the project's learning pathways and published as multilingual Open Educational Resources accessible through the WARP digital learning ecosystem.

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The allocation of learning units among consortium partners was based on each organisation's demonstrated expertise, institutional profile and contribution to the project's thematic priorities, ensuring that every target group benefited from complementary pedagogical, technical and sector-specific knowledge. The pairing of partners for each learning pathway followed the following rationale:

- New VET Trainers (IES + UNI): The partnership combined IES's expertise in pedagogy, educational leadership and institutional capacity building with UNI's experience in sustainable waste management and VET implementation, ensuring a balanced introduction to both educational methodologies and environmental subject matter.

- Seasoned VET Trainers (RecycAl + NTUA): This learning pathway brought together RecycAl's practical industrial expertise in waste management technologies with NTUA's academic excellence in pedagogical innovation, assessment methodologies, digital education and circular economy, providing advanced professional development opportunities for experienced VET educators.

- VET Educational Designers (UET + Albacademy): The allocation combined UET's expertise in curriculum development, sustainability education and academic programme design with Albacademy's experience in instructional design, educational planning and learning assessment, supporting the development of modern VET curricula.

- Professionals in Continuous Development (Plastika + FK): This partnership integrated Plastika's knowledge of innovation, entrepreneurship and labour market developments with FK's practical experience in the continuous professional development of VET educators, ensuring that the learning pathway reflected both current industry trends and lifelong learning requirements.

The complete module allocation, together with the pedagogical rationale underpinning each partner pairing and the distribution of responsibilities, was presented in detail during a dedicated online consortium meeting attended by all project partners. Following discussion, the proposed collaboration model and allocation of modules were unanimously endorsed by the partnership prior to the commencement of content development, ensuring transparency, consortium ownership and thematic coherence throughout the development of the WARP Open Educational Resources.

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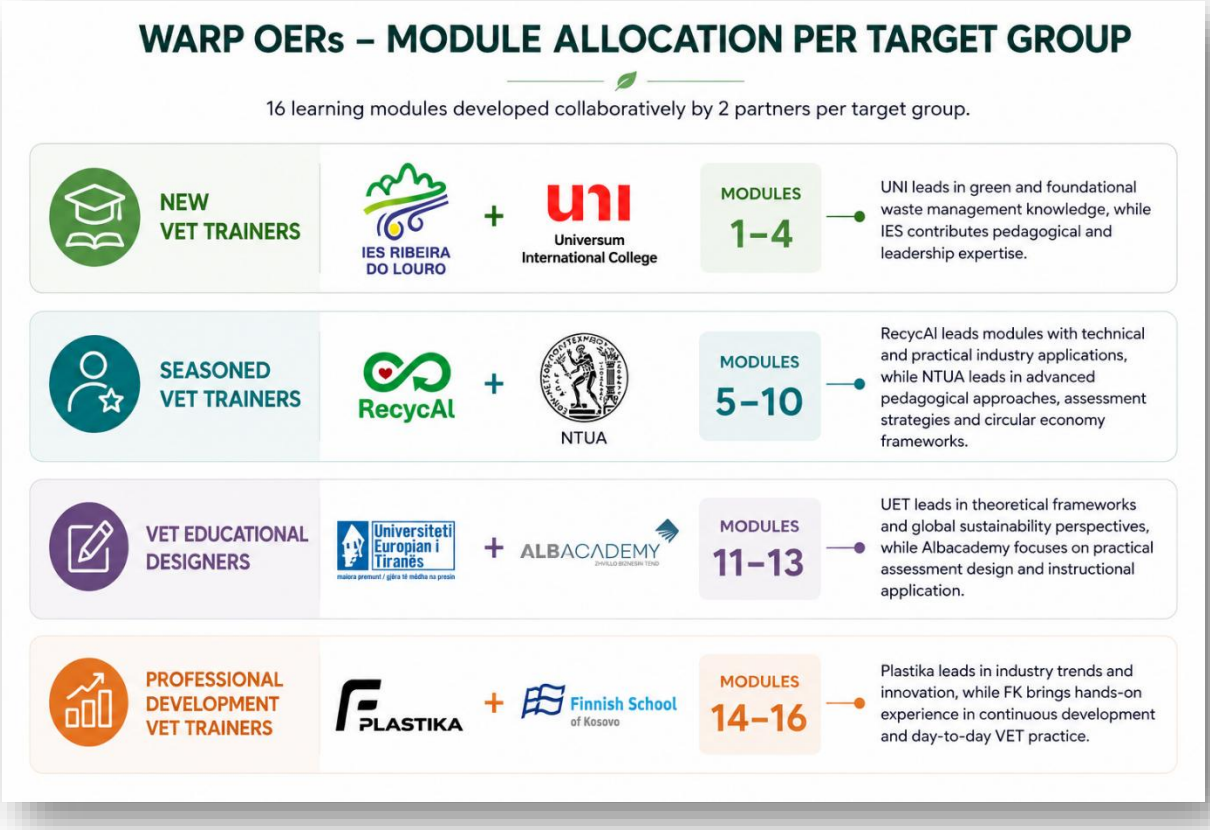


Figure 3 Module Allocation per Target Group

Table 2 Module Development Allocation

Target Group	Module	Module Title	Lead Developer	Co - developer
New VET Trainers	1	Introduction to Sustainable Waste Management	**UNI**	IES
	2	Digital Tools for Environmental Learning	**IES**	UNI
	3	Understanding Green Practices in VET	**UNI**	IES

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Target Group	Module	Module Title	Lead Developer	Co - developer
	4	Developing Leadership Skills for Sustainable Education	**IES**	UNI
Seasoned VET Trainers	5	Technological Innovations in Waste Management	**RecycAl**	NTUA
	6	Assessment Strategies for Environmental Education	**NTUA**	RecycAl
	7	Project-Based Learning in Waste Management	**NTUA**	RecycAl
	8	Work-Based Learning in Waste Management	**RecycAl**	NTUA
	9	Pedagogical Approaches for Teaching Sustainability	**NTUA**	RecycAl
	10	Integrating Circular Economy Concepts into VET	**NTUA**	RecycAl
VET Educational Designers	11	Curriculum Development for Waste Management Education	**UET**	Albacademy
	12	Integrating Global Sustainability Goals into VET	**UET**	Albacademy
	13	Evaluating and Assessing Environmental Learning Outcomes	**Albacademy**	UET
Professional Development VET Trainers	14	Continuous Development Techniques	**FK**	Plastika
	15	Interpreting Industry and Market Trends	**Plastika**	FK

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Target Group	Module	Module Title	Lead Developer	Co - developer
	16	Entrepreneurship and Innovation	**Plastika**	FK

The development of the OERs was carried out progressively through an iterative content development process. Draft learning materials were regularly exchanged among partners for review, allowing continuous feedback, discussion and refinement throughout the implementation period. This collaborative review cycle ensured that individual learning units evolved consistently with the educational objectives of the programme while maintaining coherence across the complete portfolio of learning resources.

Alongside the development of the educational content, complementary learning assets were identified and evaluated for integration within the learning units. Multimedia resources, visual supporting material and interactive educational elements were selected to enrich the learning experience, improve learner engagement and support the practical application of knowledge throughout the self-paced learning programme.

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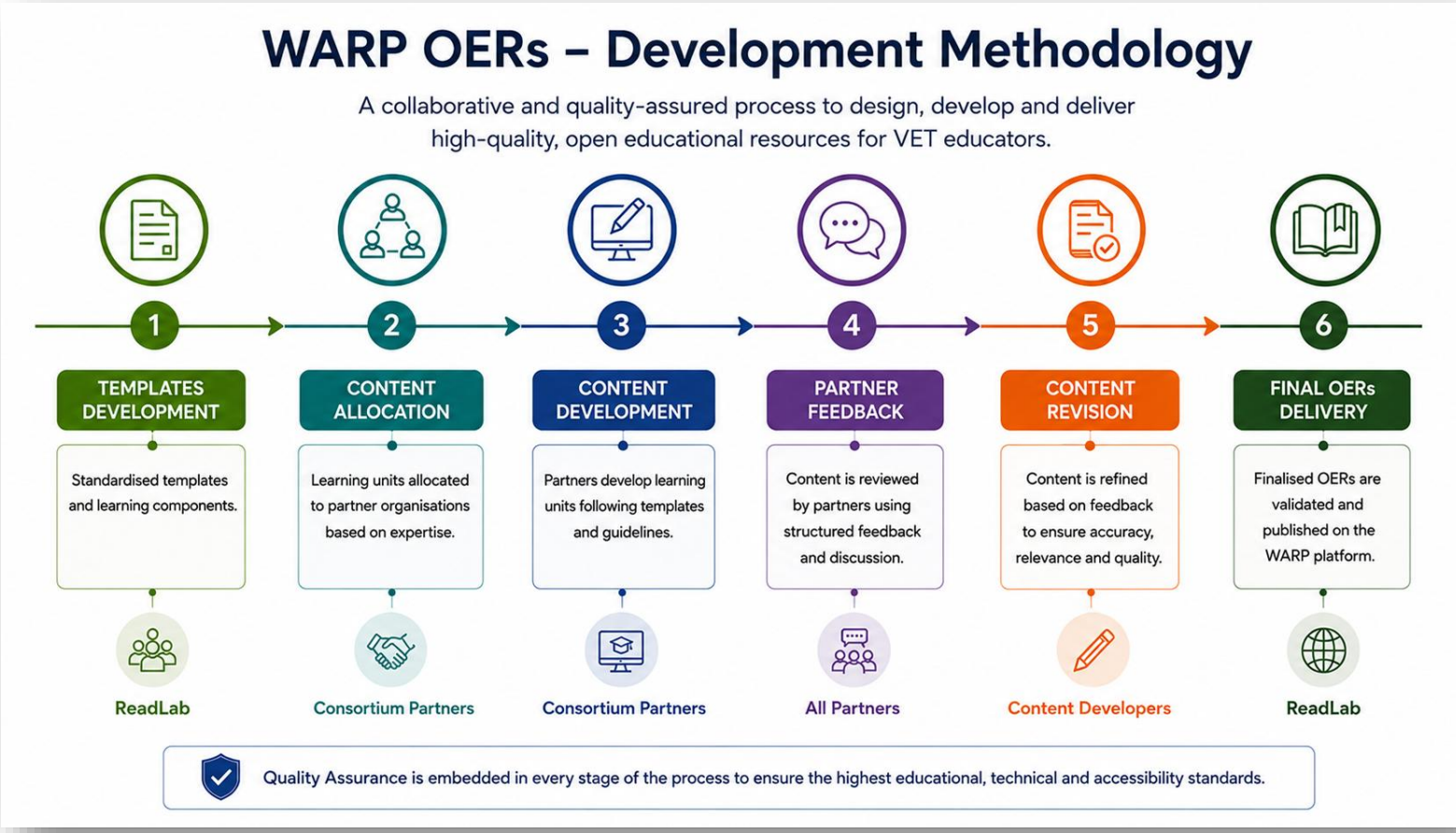


Figure 4 WARP OERs Development Methodology

5.2. Learning Units

The educational content is organised into 16 learning units distributed across four thematic learning pathways corresponding to the 4 target groups of the WARP intervention. Each learning unit addresses a specific topic within sustainable waste management, environmental education, digital transformation or professional development, allowing learners to progressively acquire specialised knowledge while following a coherent educational pathway.

Although each unit can be completed independently, together they form an integrated

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curriculum that supports gradual competence development and encourages continuous professional learning. Their modular organisation enables flexibility for learners while facilitating future updates and adaptations of the educational content.

5.3. Learning Components

Each learning unit has been developed using a consistent instructional structure that combines complementary educational components to support different learning preferences and promote active engagement. The OERs incorporate theoretical content, multimedia resources, practical examples, case studies and complementary learning materials designed to facilitate both knowledge acquisition and practical application.

The integration of diverse learning components encourages participants to engage with the content through multiple forms of interaction while supporting reflection, critical thinking and the transfer of knowledge to authentic vocational education contexts. This balanced instructional design contributes to a richer and more effective learning experience throughout the programme.

5.4. Assessment

Assessment activities have been incorporated throughout the WARP OERs to support learning progression and reinforce the achievement of the intended educational outcomes. Rather than serving exclusively as summative evaluation tools, assessments encourage learners to monitor their understanding, identify knowledge gaps and consolidate newly acquired competences as they progress through the learning units.
Consistent with the self-paced philosophy of the WARP educational framework, assessment activities within the learning modules allow participants to complete evaluations independently and according to their own learning pace. This approach supports autonomous learning while providing opportunities for continuous reflection and reinforcement of the knowledge and skills developed throughout the educational programme.

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5.5. Quality Assurance

The development of the WARP Open Educational Resources followed an iterative quality assurance approach throughout the entire production process. As the educational content was progressively developed, successive review cycles were carried out across the consortium, allowing all project partners to examine the materials, provide comments and recommendations, and contribute to their continuous refinement. This collaborative feedback process ensured consistency across the learning pathways, strengthened the pedagogical quality of the modules and supported alignment with the project's objectives, target groups and common instructional framework.

Upon completion of the OER portfolio and the preparation of Deliverable D2.2, the formal quality assurance procedure defined in D4.2 – Quality Assurance Plan was applied. The draft deliverable was submitted to the project's Quality Assurance Committee, with IES Ribeira do Louro and RecycAI designated as the official reviewers for D2.2. The evaluation was conducted against the common quality indicators established in the Quality Assurance Plan, covering the completeness and structure of the deliverable, clarity of language, consistency with the project proposal, compliance with the project template and visual identity, robustness of the development methodology, relevance for the target groups, and sustainability potential. The reviewers documented their observations through the official Deliverable Evaluation Form and provided recommendations for improvement, which were subsequently addressed by ReadLab before the final submission. In accordance with the Quality Assurance Plan, Deliverable D2.2 is also included among the major public deliverables subject to consultation by the External Advisory Group, providing an additional layer of external quality assurance.

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Figure 5 WARP OERs QA Cycle

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6. Accessibility

Accessibility has been established as one of the core design principles of both the WARP Open Educational Resources and the WARP Virtual Learning Space, ensuring that educational content can be accessed, understood and utilised by the widest possible range of learners, regardless of their individual needs, technical background or preferred learning approach. The educational ecosystem has been designed to promote inclusive and learner-centred experiences, recognising the diversity of professional backgrounds, digital competences and learning preferences among Vocational Education and Training (VET) educators.

The WARP Virtual Learning Space has been developed using the Moodle Learning Management System, taking advantage of its built-in accessibility features and following internationally recognised web accessibility practices. The platform has been designed in accordance with the Web Content Accessibility Guidelines (WCAG) 2.0, Level AA, promoting accessibility for users with visual, auditory, cognitive and motor impairments. Compliance has been verified using recognised accessibility evaluation tools, including the WAVE Web Accessibility Evaluation Tool, ensuring an accessible and user-friendly learning experience across supported browsers and devices.

Accessibility has also been considered throughout the organisation of the educational content. The learning materials follow a consistent instructional structure across all sixteen learning units, using clear navigation, logical progression, readable layouts and consistent formatting to facilitate intuitive access to the educational resources. The multilingual organisation of the platform further enables learners from different countries to navigate the learning environment efficiently and access the educational content in their preferred language.

The educational resources combine multiple instructional formats, including textual content, visual material, multimedia resources, interactive learning activities and self-assessment components, enabling participants to engage with the learning materials through different learning approaches while supporting comprehension and learner engagement. Integration within the responsive WARP Virtual Learning Space further enhances accessibility by allowing learners to access the educational resources seamlessly across desktop and mobile devices.

By embedding accessibility within both the technical infrastructure of the platform and the instructional design of the educational resources, the WARP project delivers an inclusive, multilingual and sustainable digital learning environment that promotes equal learning opportunities and broad participation across the vocational education community.

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7. Multilingualism

The WARP Open Educational Resources have been developed following a multilingual approach to ensure equitable access to educational content across all participating countries. While the original educational materials were developed in English, all 16 units have been translated into the partner languages (AL, EL, ES), allowing educators to engage with the resources in their native language and facilitating wider adoption of the project's outcomes.

To maintain consistency across all language versions, the educational resources follow a common instructional structure, unified terminology and harmonised learning organisation. This approach ensures that participants receive an equivalent learning experience regardless of the selected language while preserving the pedagogical coherence of the curriculum.

The multilingual implementation also contributes to the sustainability and transferability of the project results. By making the educational resources available in multiple languages, the WARP consortium supports their broader dissemination, encourages reuse by vocational education providers and increases the potential for adaptation in different educational and geographical contexts.

The multilingual availability of the OERs therefore represents an essential component of the project's commitment to accessibility, inclusiveness and the wider dissemination of high-quality educational resources across the European vocational education community.

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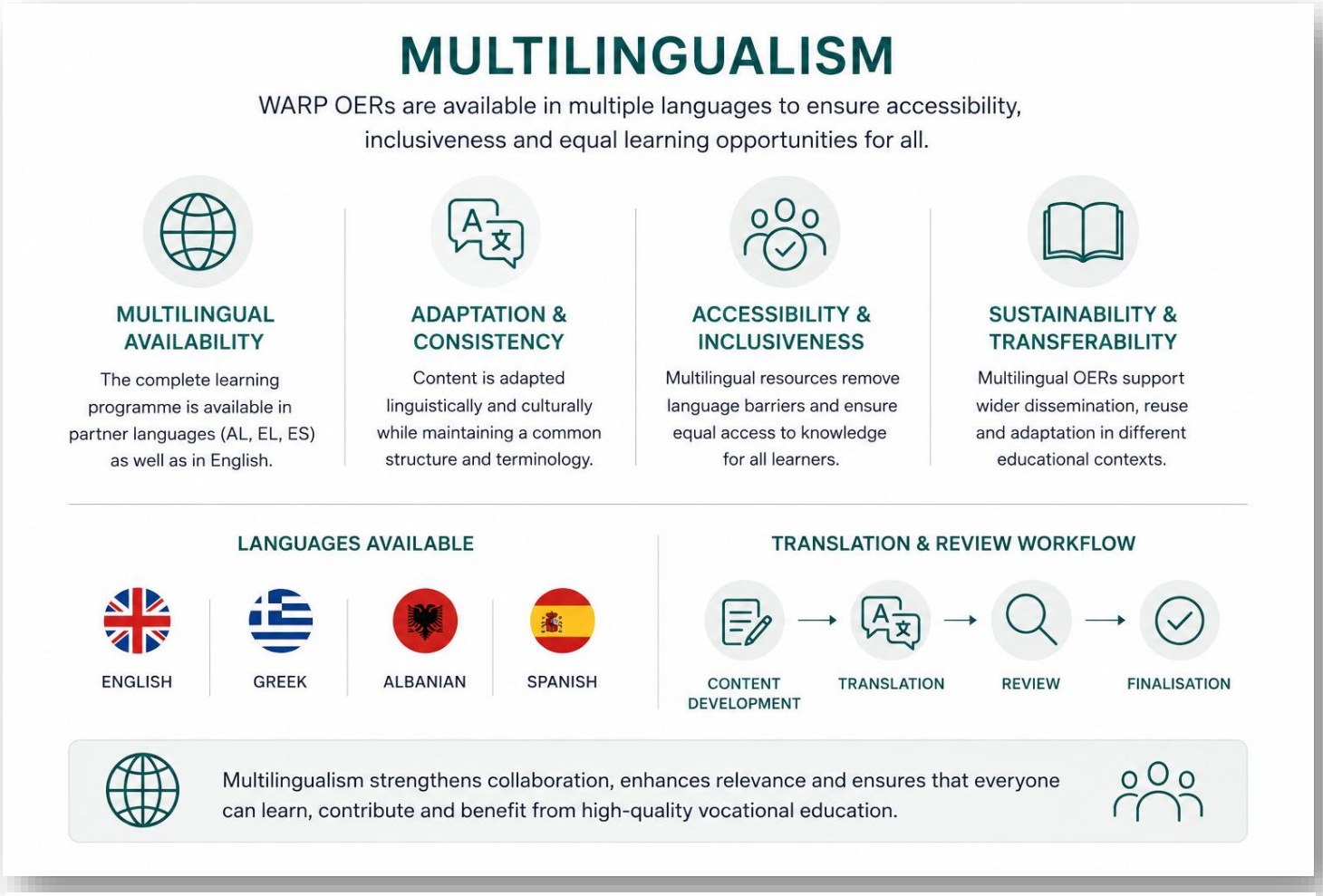


Figure 6 WARP OERs Multilinguism

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Figure 10 WARP OERs Multilingualism - Translated content example - AL

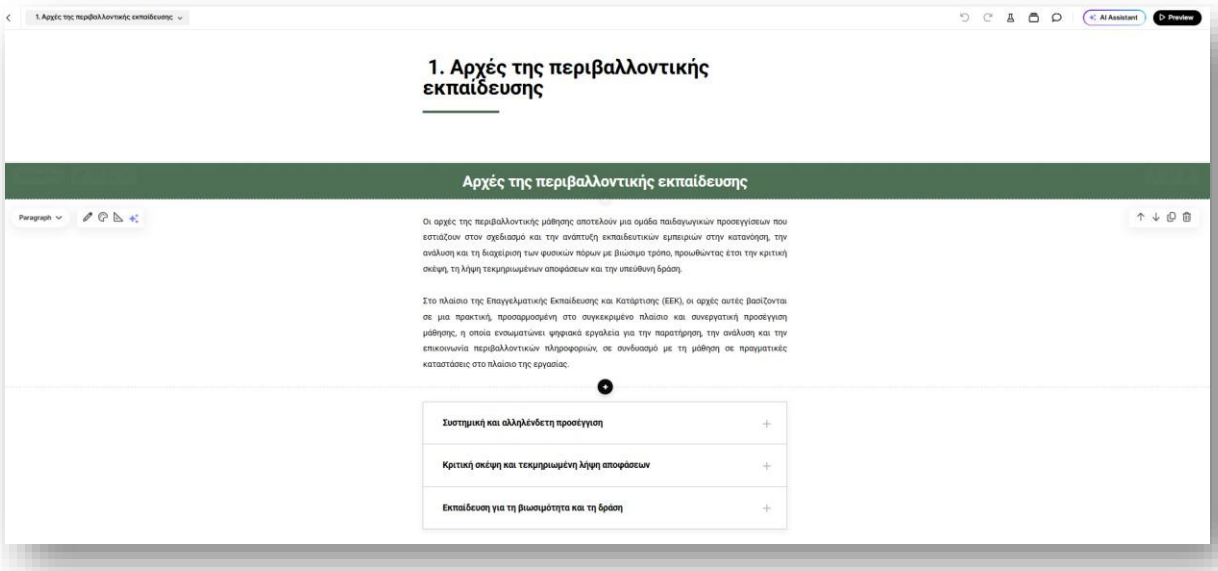


Figure 11 WARP OERs Multilingualism - Translated content example – EL

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Figure 12 WARP OERs Multilingualism - Translated content example – ES

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8. WARP Open Educational Resources

The WARP Open Educational Resources constitute the core educational content of the WARP capacity-building intervention. Developed in alignment with the project's educational framework, the OERs are organised into four learning pathways corresponding to the identified target groups and comprise 16 learning units covering the thematic priorities of the project.

The following sections present the complete portfolio of WARP Open Educational Resources. Each learning unit is documented according to a common structure to ensure consistency throughout the educational programme while facilitating future maintenance, updating and reuse of the developed materials.

8.1 Module Structure

To ensure consistency across the educational programme, all WARP learning units follow a common instructional structure regardless of their thematic focus. This standardised approach supports pedagogical coherence, facilitates multilingual implementation and provides learners with a familiar and intuitive learning experience throughout the course.

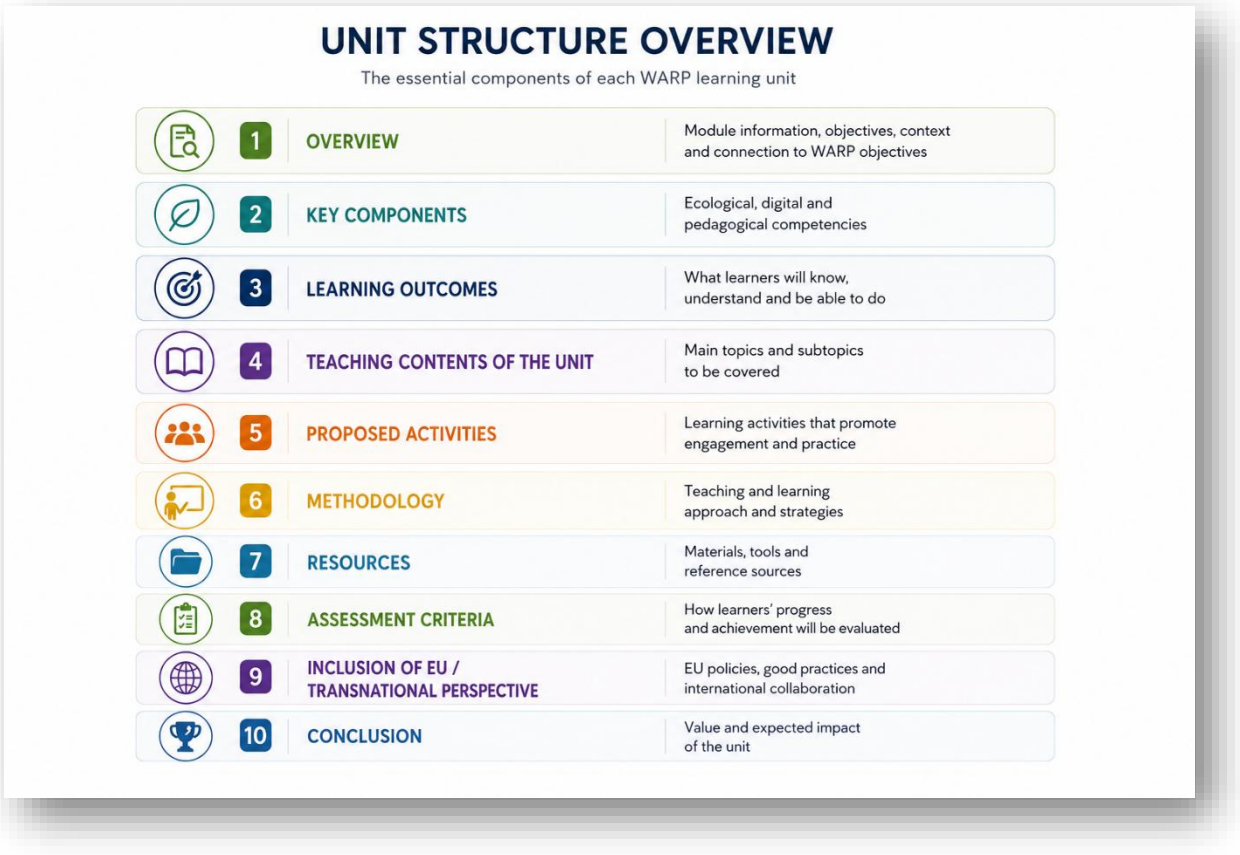


Figure 7 WARP Unit Structure Overview

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While the thematic content varies according to the learning pathway and module objectives, every unit follows the same educational framework, ensuring consistency in both instructional design and learner experience.

Each learning unit is organised around the following core components:

- **Unit Overview**, introducing the educational context of the module through its general information, pedagogical rationale, learning objectives, contextualisation within the participating countries, expected teaching outcomes and alignment with the objectives of the WARP project.
- **Competence Framework**, defining the ecological, digital and pedagogical competences to be developed, together with their associated learning outcomes and evaluation criteria.
- **Learning Outcomes**, describing the knowledge, skills and competences learners are expected to acquire upon successful completion of the unit.
- **Teaching Contents**, organised into thematic instructional units that combine theoretical explanations with contextualised examples, practical applications, multimedia resources and interactive learning objects.
- **Proposed Learning Activities**, encouraging the practical application of knowledge through collaborative, experiential and project-based learning, supported by interactive digital activities and authentic vocational scenarios.
- **Methodology**, outlining the recommended pedagogical approaches, including project-based learning, collaborative learning, blended learning, experiential activities, workplace-oriented learning and community engagement.
- **Supporting Resources**, providing learners and educators with complementary educational materials, digital resources, policy documents, practical tools and reference sources that enrich the learning experience.
- **Assessment Criteria**, defining the methods through which learners' knowledge acquisition, skills development and competence achievement are evaluated using formative and summative assessment approaches.
- **European and Transnational Perspective**, highlighting the relevance of the learning unit within the broader European policy framework by incorporating comparative examples, European legislation, good practices and transnational perspectives that strengthen the transferability and applicability of the educational content.

Beyond this common instructional structure, the WARP Open Educational Resources have been designed as interactive digital learning experiences that combine multiple instructional formats to maximise learner engagement and accommodate different learning preferences.

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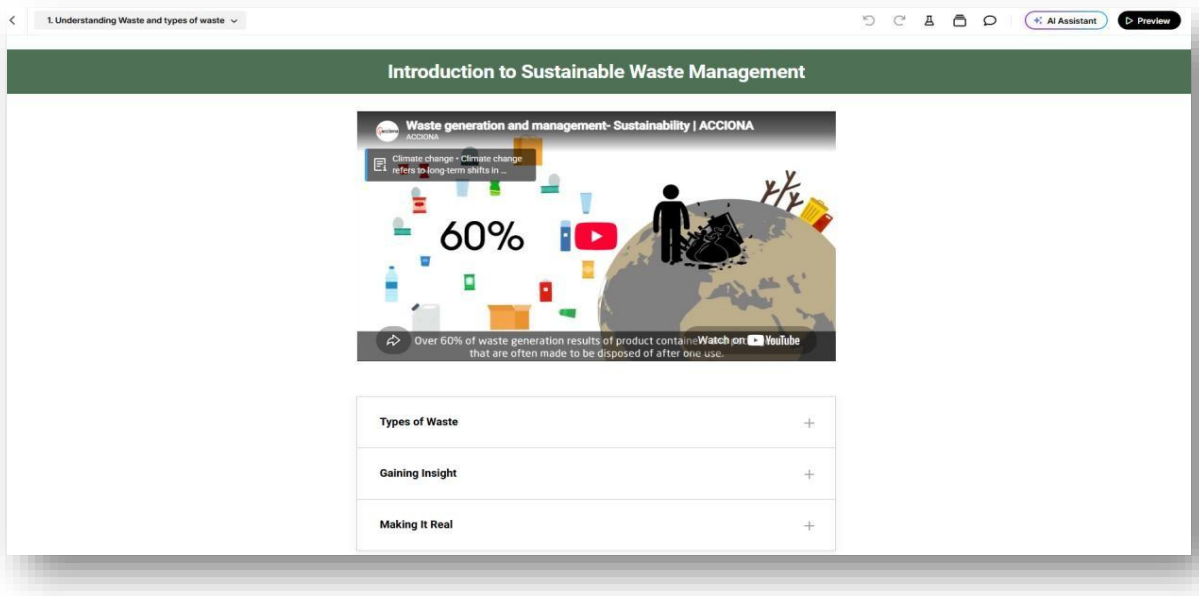


Figure 14 WARP OERs RISE multimedia and interactive content example - Module 1 Introduction to Sustainable Waste Management – video, lists

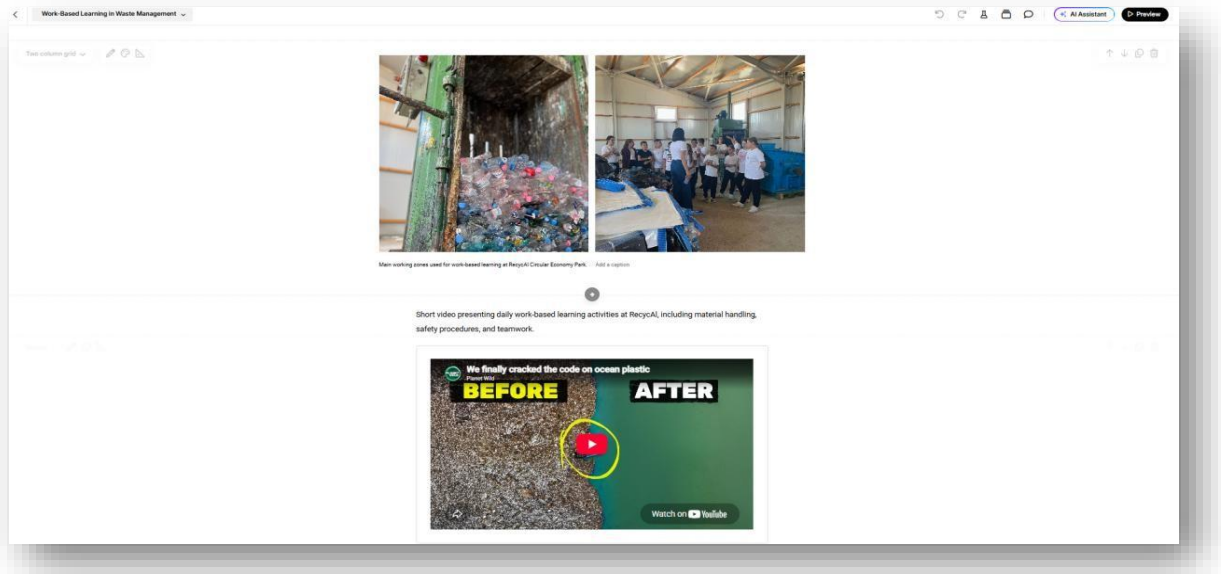


Figure 15 WARP OERs RISE multimedia and interactive content example - Module 8 Work-based Learning in Waste Management – images, video

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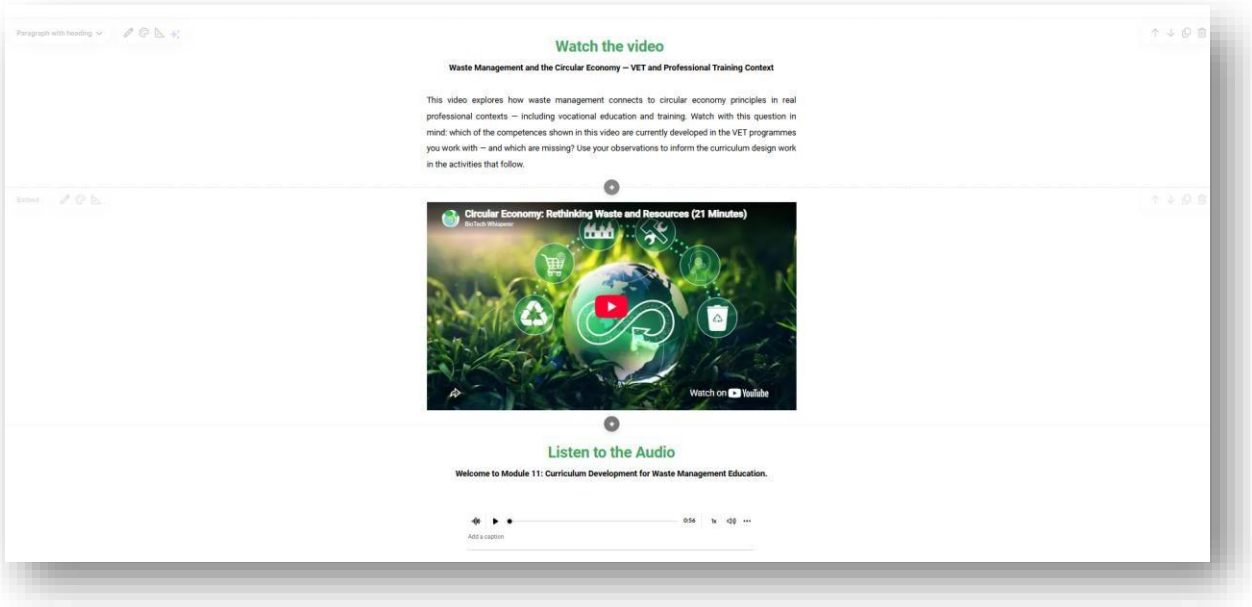


Figure 16 WARP OERs RISE multimedia and interactive content example - Module 11 Curriculum Development for Waste Management Education – video, audio

Originally developed in English and subsequently translated into the partner languages (Albanian, Greek and Spanish), the 16 learning units incorporate a diverse range of digital learning components, including:

- Videos and audio resources, introducing key concepts through multimedia explanations and expert-led presentations.
- Downloadable files and supplementary educational resources, providing learners with additional reading material, reference documents, practical tools and supporting resources.
- Flashcards, reinforcing key terminology and core concepts through active recall techniques.
- Interactive accordions and tabbed content, presenting information progressively to improve readability and facilitate structured knowledge acquisition.
- Charts, diagrams and visual resources, supporting the interpretation of concepts, processes and relationships through graphical representation.
- Interactive knowledge checks, including multiple-choice, multiple-response, matching and fill-in-the-blank activities that provide continuous formative assessment and immediate learner feedback.

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- Scenario-based learning activities, encouraging learners to analyse authentic vocational situations and apply theoretical knowledge to practical decision-making.

- Practical exercises and hackathon-style tasks, promoting collaborative problem-solving, innovation and the application of learning outcomes to realistic vocational and sustainability-related challenges.

The integration of these complementary learning components transforms each module into an interactive learning experience that promotes active participation, critical thinking, reflection and experiential learning, rather than passive content consumption. This combination of multimedia presentation, knowledge validation and practical application ensures that learners develop both the technical and transversal competences required to address contemporary challenges in sustainable waste management and vocational education.

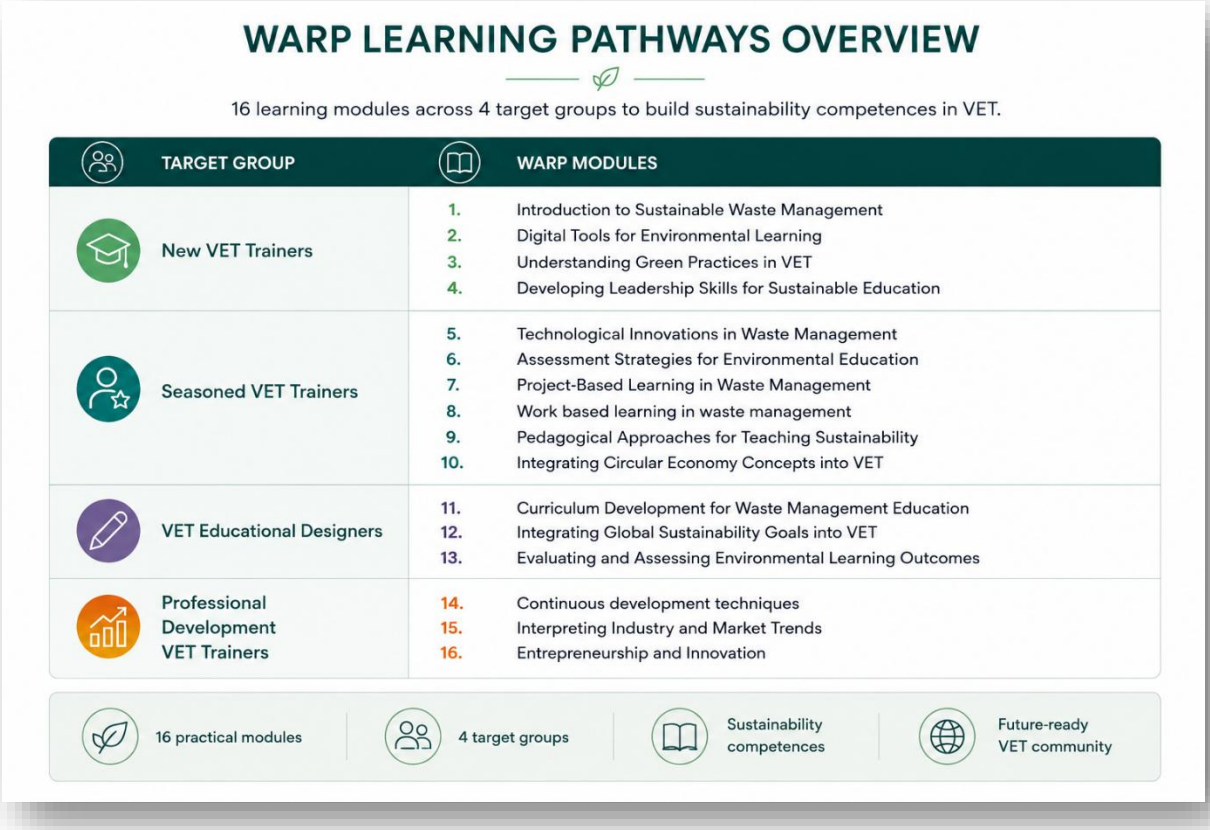


Figure 8 WARP Learning Pathways Overview

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8.2 Learning Pathway 1 – New VET Trainers

Module 1 – Introduction to Sustainable Waste Management

1. Overview of the Unit

1.1. Unit information

Unit title	**Introduction to Sustainable Waste Management**
This unit is part of…	Standalone course
Prerequisites (if any)	N/A

1.2. Justification and objectives of the Teaching Unit

This module provides students with a foundational understanding of sustainable waste management principles and practices. It introduces key concepts related to waste generation, classification, and management systems, with emphasis on environmentally sound, socially responsible, and economically viable approaches. Students will explore traditional and modern waste management methods, the waste hierarchy, and the role of sustainability in minimizing environmental degradation while promoting resource efficiency. The increasing volume and complexity of waste generated by modern societies present significant environmental, health, and economic challenges. Unsustainable waste management practices contribute to pollution, climate change, and public health risks. This module is essential in equipping students with the knowledge required to understand these challenges and to adopt sustainable waste management strategies aligned with global sustainability goals. It also fosters environmental awareness and responsible citizenship, supporting national and international sustainability frameworks. The main objectives of the module are to:

1. Explain the concept and importance of sustainable waste management.
2. Identify and classify different types of waste and their sources.
3. Analyse the environmental and health impacts of improper waste management practices.
4. Describe the waste hierarchy and its application in sustainable systems.
5. Demonstrate awareness of individual, community, and institutional roles in waste reduction and management.

1.3. Contextualization of the issue in the country (Albania or Kosovo)

In Kosovo, sustainable waste management is a priority area for environmental protection, public health improvement, and alignment

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with European environmental policies. Kosovo faces significant waste management challenges linked to post-conflict development, rapid urban growth, and limited technical and financial resources. Municipal solid waste generation has increased steadily, while waste separation, recycling systems, and treatment facilities remain underdeveloped. Illegal dumping sites and insufficient public awareness continue to pose environmental and health risks, particularly in rural and peri-urban areas.
The unit Introduction to Sustainable Waste Management responds directly to these national challenges by providing learners with essential knowledge on sustainable waste practices and systems. It aligns with Kosovo's environmental legislation and strategic goals aimed at improving waste governance, strengthening municipal waste services, and increasing citizen engagement. By contextualizing sustainability concepts within Kosovo's realities, the unit prepares learners to contribute effectively to national and local waste management improvements.

1.3. Expected results in terms of teaching practices

Teacher training for the *Introduction to Sustainable Waste Management* unit will lead to more learner-centered and practice-oriented teaching. Educators will apply active learning methods such as case studies and discussions, integrate local (Albania/Kosovo) waste management contexts into lessons, and use varied assessment approaches to evaluate knowledge, skills, and competences. Overall, teaching practices will better promote sustainability awareness, critical thinking, and real-world application of concepts.

1.4. Connection with the objectives of the WARP Project

Objective 1: Build Capacity Through Research
The module integrates research-based learning by introducing learners and trainers to the analysis of current waste management policies and practices at local and national levels. Through case studies and applied research tasks, the module enables identification of gaps and best practices, supporting evidence-based approaches to sustainable waste management and high-impact interventions.
Objective 2: Strengthen VET Systems
The module contributes to strengthening VET systems by upskilling trainers and educators with updated knowledge on recycling, resource efficiency, and green practices. It enhances VET curricula through modern, sustainability-focused content and practical teaching methodologies aligned with emerging environmental and circular economy standards.
Objective 3: Connect Education with the Labour Market
The module bridges education and labour market needs by promoting collaboration between VET institutions, municipalities, and waste management and recycling industries. Training content reflects real-world operational practices and skills required in the green economy, thereby improving learner employability and workforce relevance.

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Objective 4: The module supports long-term impact by encouraging engagement with civil society through awareness campaigns, community-based activities, and open educational resources. A transferability approach is embedded to enable replication and scaling of best practices across institutions, ensuring sustainability beyond the project lifecycle.

2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	This module develops students' ecological competence by fostering an understanding of environmental sustainability principles, particularly in relation to waste generation, management, and resource use. Learners gain the ability to recognize the environmental impacts of waste, apply sustainable waste management practices, and demonstrate responsible behaviour that supports environmental protection and sustainable development.
Description of the Learning Outcomes related to this competence	Student will be able to: • *Explain the environmental impacts of improper waste management* Students will be able to discuss how inadequate waste handling—such as open dumping, uncontrolled burning, or improper disposal of hazardous materials—can damage ecosystems and pose risks to human health. They should be able to explain issues like water and soil pollution, air contamination, greenhouse gas emissions from landfills, and the broader effects on biodiversity and climate change. Learners will also be encouraged to relate these impacts to challenges observed in their own communities. • *Apply the principles of the waste hierarchy to reduce environmental harm:* Students will understand the importance of prioritizing waste prevention and reduction before considering recycling or disposal. They will be able to apply the principles of reduce, reuse, recycle, recover, and responsibly dispose when evaluating everyday situations at home, in school, or in the workplace. Emphasis will be placed on making informed choices that minimize resource use and environmental harm.

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	• *Identify sustainable waste management practices relevant to local and national contexts:* Students will gain awareness of waste management practices that are realistic and effective within their own region or country. This includes understanding existing systems, policies, and cultural habits that influence waste handling. They should be able to identify options such as waste segregation at source, composting of organic waste, recycling programs, producer responsibility initiatives, and other context-appropriate solutions. • Demonstrate environmentally responsible attitudes and behaviors in personal, educational, or workplace settings. Beyond theoretical knowledge, students will be expected to adopt environmentally responsible habits. This may include reducing unnecessary consumption, sorting waste correctly, supporting reuse initiatives, and encouraging sustainable practices among peers and colleagues. The goal is for learners to develop a sense of personal responsibility and actively contribute to more sustainable environments in their personal, academic, and professional lives.
Description of the evaluation criteria	Ecological competence will be verified through: • *Written or oral assessments evaluating understanding of sustainability and waste management concepts:* Students may complete written tests, reflective essays, or participate in oral examinations and discussions that assess their understanding of key concepts related to sustainability and waste management. These assessments will evaluate not only factual knowledge but also the ability to explain ideas clearly and critically. • *Case study analyses or practical assignments applying sustainable practices to real-life scenarios:*

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	Students will be asked to analyze real or simulated scenarios involving waste management challenges. Through these activities, they will demonstrate their ability to apply sustainable principles, propose realistic solutions, and justify their decisions based on environmental considerations. • *Project work or presentations demonstrating the use of the waste hierarchy and environmentally sound solutions:* *Students may develop individual or group projects that showcase their understanding of the waste hierarchy and environmentally responsible strategies. Presentations will allow them to communicate their findings, explain their reasoning, and illustrate how sustainable approaches can be implemented in practical contexts.* • *Observation of learner participation and engagement in discussions, group activities, or awareness campaigns related to environmental responsibility:* Ongoing observation of student involvement will form part of the evaluation process. Active participation in class discussions, collaborative work, and environmental awareness initiatives will provide evidence of both understanding and commitment to responsible environmental behavior.

2.2. Digital competencies

Description of the competence	This unit helps students develop basic digital skills needed to find, use, and share information related to waste management and environmental protection. Learners use digital tools to support learning, communication, and simple analysis of waste management practices.
Description of the Learning Outcomes related to this competence	Students will be able to: • *Use digital devices and online tools to search for information on waste management:* Students will know how to use computers, tablets, or smartphones to find reliable information on waste management topics. They will be able to carry out simple online

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	searches, recognize trustworthy sources, and select relevant information for learning or practical use. • *Access and understand simple digital materials such as videos, presentations, or online guidelines:* *Students will be able to view and comprehend basic digital content such as instructional videos, online presentations, and publicly available guidelines. They will demonstrate the ability to follow digital instructions and extract key information related to sustainable waste practices.* • *Use basic software (e.g. word processing or presentation tools) to complete assignments:* *Students will develop practical skills in using common software tools, such as word processors and presentation programs, to prepare assignments, short reports, or visual materials. The focus will be on organizing information clearly and presenting it in a simple, effective way.* • *Communicate and share information on sustainable waste practices using digital platforms:* *Students will be able to communicate ideas and share information about sustainable waste management using digital platforms such as email, learning management systems, or collaborative online tools. They will demonstrate responsible and respectful digital communication while promoting environmentally sustainable practices.*
Description of the evaluation criteria	Digital competence will be verified through: • *Completion of digital tasks and online research activities.* *Students may be asked to complete short online research tasks, such as finding information about local recycling rules, identifying types of waste and their disposal methods, or summarizing key points from an environmental website. These tasks will*

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	demonstrate their ability to search for information and use digital resources effectively. • *Creation of simple digital documents or presentations: Learners will prepare basic digital outputs, such as a short written assignment using a word processor or a simple presentation outlining sustainable waste practices. Assessment will focus on clarity, correct use of software features, and the ability to organize information in a logical way.* • *Participation in online learning activities: Students will be evaluated on their engagement with digital learning environments, such as submitting assignments through an online platform, participating in discussion forums, or completing online quizzes related to waste management topics. This will show their ability to navigate and use digital platforms for learning purposes.* • *Responsible and appropriate use of digital tools: Observation during learning activities will be used to assess how students handle digital tools. This includes using devices appropriately, following basic online safety rules, respecting digital etiquette, and using technology in a way that supports learning objectives.*

2.3. Pedagogical competencies

Description of the competence	This module supports the development of basic pedagogical skills by encouraging active participation, teamwork, and practical learning. Learners improve their ability to learn independently, work with others, and apply knowledge through hands-on activities related to sustainable waste management.
Description of the Learning Outcomes related to this competence	Students and teachers will be able to: • *Participate actively in collaborative learning activities.* Learners will contribute meaningfully to group discussions, teamwork, and hands-on exercises. They will show willingness to share ideas, listen to others,

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	and cooperate in achieving common learning goals. Teachers will facilitate inclusive participation and encourage constructive dialogue. • *Follow instructions and complete tasks independently or collaboratively***.** Students will demonstrate the ability to understand and follow given guidelines, manage their time effectively, and complete assigned activities either on their own or as part of a team. Teachers will support structured learning while promoting learner autonomy and shared responsibility. • *Transfer learning to real-life contexts.* Participants will be able to apply acquired knowledge and skills to practical, everyday waste management situations. For example, they may suggest improvements for waste sorting in their school or workplace, or propose simple actions to reduce waste in their community. • *Reflect on learning and respond to feedback.* Students and teachers will engage in self-reflection to evaluate their progress, identify strengths and areas for improvement, and make adjustments based on feedback. This reflective approach will support continuous improvement and deeper understanding.
Description of the evaluation criteria	Pedagogical competence will be assessed through: • *Observation of engagement and participation***.** Learners' involvement during lessons, group discussions, and collaborative activities will be observed to assess their level of engagement, cooperation, and willingness to contribute. This includes active listening, sharing ideas, and respectful interaction with others. • *Completion of practical tasks and small projects.* Students will be assessed on their ability to complete hands-on exercises, learning tasks, or small projects related to waste management. These activities will demonstrate how well learners can apply theoretical knowledge in practical situations. • *Peer assessment and self-reflection with trainer feedback.*

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	Learners will take part in peer and self-assessment activities that encourage reflection on their own learning and the learning of others. Trainer feedback will support this process by helping learners identify strengths, address challenges, and improve performance. • *Review of learning outputs and task results.* Completed assignments, worksheets, or project outcomes will be reviewed to evaluate learners' understanding of key concepts and their ability to apply what they have learned effectively in relevant contexts.

3. Learning outcomes

By the end of this course, students should be able to:

	Knowledge	**Skills**	**Competences**
LO1	Define sustainable waste management and identify its core principles, types (solid, organic, hazardous), and sources.	Classify various waste streams and differentiate between unsorted municipal waste and source-separated materials	Demonstrate environmental responsibility by making informed waste-disposal decisions in daily activities.
LO2	Explain the environmental and health impacts of improper waste disposal and the benefits of the Waste Hierarchy (Reduce, Reuse, Recycle, Recovery, Disposal).	Correctly categorize various waste streams (organic, plastic, paper, hazardous, e-waste) and identify appropriate management methods for each.	Propose and implement a waste reduction initiative within a VET or workplace context.
LO3	Analyze the levels of the EU Waste Hierarchy (Prevention, Reuse, Recycling, Recovery, Disposal).	Evaluate real-life waste management scenarios against the principles of a Circular Economy.	Implement basic circularity practices, such as choosing reusable alternatives

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			over disposables, within a local context.
LO4	Summarize the national waste policies and regional sustainability goals of Albania and Kosovo.	Compare local waste practices with EU benchmarks to identify areas for gradual improvement.	Advocate for regional cooperation and alignment with EU environmental standards through community engagement.
LO5	Understand the distinct roles that individuals, institutions, and communities play in a waste system.	Design clear communication tools (infographics/posters) to promote public awareness of sustainable habits.	Collaborate with peers to develop innovative, feasible solutions for local waste challenges during a mini-hackathon.

4. Teaching contents of the Unit *(the following are proposals for the content of the unit)*

Module 1: Introduction to Sustainable Waste Management			
Unit 1: Understanding Waste & Principles of Sustainable Waste Management	**Content type**	**Content development**	**Notes**
Unit 1: *Understanding Waste and types of waste*	Paragraph/Heading	Main content of the unit: This unit introduces learners to the principles of sustainable waste management, including types of waste, environmental impacts, the waste hierarchy, and strategies to reduce, reuse, recycle, and recover. *Understanding Waste* Definition of Waste Waste refers to any material or product that is discarded or intended to be discarded after use. Waste can be generated from households, schools, workplaces, industries,	

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		and commercial activities. Types of Waste Students will be introduced to common waste categories, including: • Solid waste: household waste, packaging, food waste • Organic waste: food scraps, garden waste • Recyclable waste: paper, plastic, glass, metals • Hazardous waste: batteries, chemicals, electronic waste • Industrial and commercial waste	Waste
1.1. Importance and Principles of Sustainable Waste Management	Para-graph/Sub-heading	Importance of Sustainable Waste Management This section explains why waste management is a critical environmental and social issue. Environmental Importance • Prevents pollution of air, water, and soil • Reduces greenhouse gas emissions from landfills • Protects ecosystems and biodiversity • Conserves natural resources through reuse and recycling Health and Social Importance • Reduces health risks linked to improper waste disposal • Improves living conditions in communities • Supports cleaner and safer public spaces • Creates opportunities for green jobs and local development <u>Principles of Sustainable Waste Management</u> Learners are introduced to the core principles that guide sustainable waste practices: Waste Prevention and Reduction	

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		Minimizing waste generation at the source by making thoughtful consumption choices. Reuse and Recycling Extending the life of products and materials through reuse and proper recycling. Resource Efficiency Using materials and energy efficiently to reduce environmental pressure. Shared Responsibility Understanding the roles of individuals, businesses, institutions, and governments in waste management. An introduction to the waste hierarchy may be included here as a basic concept, with more detailed coverage in later modules. <u>Roles and Responsibilities</u> This section emphasizes that sustainable waste management requires collective action: • Individuals: reducing waste, sorting waste, making sustainable choices • Schools and workplaces: promoting waste separation and awareness • Communities: organizing clean-up activities and recycling initiatives • Local authorities and governments: providing infrastructure, regulations, and enforcement	
1.1.	Paragraph	Improper waste management harms soil, water, and air quality and poses health risks.	Improper waste

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		Improper waste management is not merely an aesthetic or logistical issue; it is a significant environmental and public health concern. When waste is not properly collected, sorted, treated, or disposed of, it directly affects soil, water, and air quality, creating long-term ecological and social consequences. When waste is dumped indiscriminately or sent to poorly managed landfills, harmful substances can seep into the soil. Over time, toxic chemicals from plastics, batteries, electronic waste, and industrial materials may leach into the ground. This contamination reduces soil fertility, disrupts microorganisms essential for healthy ecosystems, and can enter agricultural systems, ultimately affecting food safety and human health. Water systems are particularly vulnerable to inadequate waste management. Rainwater can carry pollutants from open dumping sites into rivers, lakes, and groundwater sources through a process known as leaching. Hazardous substances such as heavy metals, microplastics, and chemical residues may contaminate drinking water supplies and aquatic ecosystems. Marine pollution, largely driven by plastic waste, threatens biodiversity, harms wildlife through ingestion and entanglement, and disrupts entire food chains. In this way, waste discarded on land often becomes a global environmental issue once it reaches waterways and oceans. Air quality is also significantly affected. The open burning of waste, a practice still common in some areas, releases toxic pollutants including dioxins, particulate matter, and greenhouse gases. Even in controlled landfill environments, the decomposition of organic waste without adequate oxygen generates methane, a greenhouse gas far more potent than carbon dioxide	management harms soil, water, and air quality and poses health risks. Sustainable practices protect the environment and support circular economy goals.

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		in contributing to climate change. These emissions not only accelerate global warming but also contribute to respiratory illnesses and other health conditions among nearby populations. Beyond environmental degradation, improper waste management poses serious health risks. Accumulated waste creates breeding grounds for disease vectors such as rodents, flies, and mosquitoes, increasing the spread of infectious diseases. Informal waste workers, who often handle hazardous materials without protective equipment, are especially vulnerable to injuries, toxic exposure, and long-term health complications. Communities living near unmanaged waste sites frequently experience reduced quality of life and higher exposure to environmental hazards. In contrast, sustainable waste management practices offer a comprehensive response to these challenges. Strategies such as waste prevention, source separation, recycling, composting, and safe disposal reduce pollution at its origin. By minimizing the volume of waste sent to landfills and promoting material recovery, sustainable systems conserve natural resources, reduce greenhouse gas emissions, and protect ecosystems. Moreover, sustainable waste management is closely aligned with the principles of the circular economy. Rather than following a linear model of "take–make–dispose," circular systems aim to design out waste, keep materials in use for as long as possible, and regenerate natural systems. Through reuse, repair, recycling, and recovery, materials are reintroduced into production cycles instead of being discarded. This approach reduces environmental pressure, supports resource efficiency, and encourages innovation in product design and business models.	

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		Ultimately, responsible waste management is not simply about handling refuse; it is about protecting environmental integrity, safeguarding public health, and fostering sustainable economic development. By transitioning toward circular practices, societies can transform waste from a problem into an opportunity — reducing harm while creating value for present and future generations. .	
	Note		
	Columns	**What Is a Mixed Waste Bin?** At the end of a busy day, it is easy to throw everything into one bin without thinking too much about it. A used tissue, a snack wrapper, leftover food packaging, a broken cup — all of it disappears into the same container. That container is what we call a **mixed waste bin**. A mixed waste bin is designed to collect waste that has not been separated. It holds a mixture of materials — plastics, food scraps, paper, small broken items — all combined together. Because these materials are mixed, they become difficult to sort and recover later. What might have been recyclable on its own often becomes contaminated and ends up being discarded permanently. In many homes, schools, and workplaces, the mixed waste bin is the "default" bin — the one people use when they are unsure where something belongs. For this reason, it often contains materials that could have been composted or recycled if separated properly. Once collected, mixed waste is usually sent to landfill or incineration facilities. In landfills, organic materials break down and	

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		produce methane, a greenhouse gas that contributes to climate change. In incineration plants, waste is burned, sometimes generating energy, but also producing emissions. In both cases, valuable materials are lost from the production cycle. The mixed waste bin therefore represents more than just convenience — it reflects how we manage resources. The fuller the mixed waste bin, the more materials are being removed from circulation. In contrast, when recycling and compost bins are used effectively, the mixed waste bin becomes smaller, signaling a more sustainable system. In a circular economy, the goal is not to eliminate the mixed waste bin entirely — as some materials are still difficult to recycle — but to reduce its use as much as possible. Ideally, it should be the last option, used only for items that cannot be reused, repaired, composted, or recycled. In simple terms, the mixed waste bin tells a story about our habits. It shows whether we treat materials as disposable or as resources with continued value. By becoming more mindful of what we place inside it, we take a small but meaningful step toward protecting the environment and supporting more sustainable waste practices.	
Types of waste		**Understanding Different Types of Waste** Every day, without thinking much about it, we throw things away — a banana peel after lunch, a plastic bottle from a drink, an old newspaper, or even a broken phone. But not all waste is the same. Understanding the different types of waste helps us make better choices and manage our resources more responsibly.	

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		Let's take a closer look at the most common types of waste we encounter in daily life. **Organic Waste – Nature's Cycle** Organic waste comes from living things — plants and animals. It includes food scraps, fruit and vegetable peels, coffee grounds, garden leaves, and leftover meals. Unlike many other types of waste, organic materials naturally break down over time. In nature, nothing is wasted — fallen leaves decompose and return nutrients to the soil. However, when food waste is thrown into landfills, it decomposes without enough oxygen and produces methane, a powerful greenhouse gas. When we compost organic waste instead of throwing it away, we are helping nature complete its cycle. Composting turns waste into nutrient-rich soil that can grow new plants. What seems like "garbage" can actually become a valuable resource. **Plastic Waste – The Convenience Problem** Plastic has made modern life easier. It keeps food fresh, makes products lightweight, and is inexpensive to produce. But its convenience comes with a cost. Plastic waste includes bottles, packaging, shopping bags, wrappers, and disposable cutlery. Unlike organic waste, plastic does not easily break down. It can take hundreds of years to decompose. Over time, it breaks into tiny particles called microplastics, which can end up in oceans, soil, and even our food chain. Because plastic is so persistent, the best solution is not just re-	

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		cycling — it is reducing and reusing whenever possible. Choosing refillable bottles, reusable bags, and less packaging can significantly reduce plastic waste. Plastic reminds us that convenience today can create long-term environmental challenges tomorrow. **Metal Waste – A Hidden Opportunity** Metal waste includes items like aluminum cans, steel food tins, foil, and scrap metal. Unlike plastic, metals can be recycled again and again without losing quality. Producing new metal from raw materials requires large amounts of energy and mining. However, recycling metal saves significant energy and reduces environmental damage. For example, recycling aluminum uses far less energy than producing it from bauxite ore. When we place metal items in recycling bins, we are not just throwing them away — we are giving them a second life. **Paper Waste – A Renewable but Limited Resource** Paper comes from trees, a renewable resource — but only if forests are managed responsibly. Paper waste includes newspapers, office paper, magazines, cardboard boxes, and packaging materials. While paper can biodegrade, sending it to landfill still wastes valuable resources and contributes to greenhouse gas emissions. Recycling paper reduces the need to cut down more trees and saves water and energy used in production. Simple habits — like printing less, using both sides of paper, and recycling properly — can make a meaningful difference.	

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		E-Waste – The Fastest Growing Waste Stream Electronic waste, or e-waste, includes discarded phones, laptops, televisions, batteries, and cables. In our digital world, devices are replaced more frequently than ever before. E-waste is complex. It contains valuable materials like gold and copper, but also hazardous substances such as lead and mercury. If not handled properly, these materials can contaminate soil and water and pose serious health risks. Unlike other waste types, e-waste requires special collection and recycling systems. Repairing devices, extending their lifespan, and using certified recycling centers are essential steps toward more responsible consumption. E-waste challenges us to rethink how quickly we replace technology and how we value the materials inside our devices. **Why Understanding Waste Types Matters** Recognizing the differences between organic waste, plastic, metal, paper, and e-waste helps us make smarter decisions. It encourages us to: • Separate waste correctly • Reduce unnecessary consumption • Reuse items whenever possible • Support recycling and recovery systems • Appreciate that waste is often a misplaced resource Waste is not just something we throw away. It reflects our habits, our choices, and our responsibility toward the environment and future generations.	

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	Table	Column 1: Waste Type Column 2: Example Column 3: Management Strategy Row 1: Organic / Food scraps / Composting Row 2: Plastic / Bottles / Recycling Row 3: Paper / Newspapers / Recycling	
	Divider	By default, dividers are labeled as CONTINUE, but you can customize this label as needed.	
2.	Statement	Students understand why sustainable waste management is crucial for environmental, social, and economic health	
3.	List	• Reduce waste generation • Reuse materials • Recycle and recover resources • Dispose safely	Use a bulleted list
4. Municipal Waste Composition:	Chart	Municipal Waste Composition: Organic = 40%, Plastic = 20%, Paper = 15%, Metal = 10%, Other = 15%	Use a pie chart
5. *recycling centre*	Image	***What Is a Recycling Center?*** *A recycling center is a specialized facility where collected waste materials are sorted, processed, and prepared so they can be transformed into new products. Rather than allowing materials to end up in landfill, a recycling center gives them a second life.* *When we place paper, plastic bottles, glass jars, or metal cans into the correct recycling bin, those materials are transported to a recycling center. There, they are carefully separated — sometimes by hand, often using advanced machines that detect weight, size, magnets, air flow, or optical scanners. The goal is to recover materials*	Image centered 

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		in a clean and usable form so they can re-enter the production cycle. *In this way, a recycling center acts as a bridge between waste and resource recovery.* ***What Happens Inside a Recycling Center?*** *Although processes vary depending on the facility, recycling centers generally follow several key steps:* 1. ***Collection and Delivery*** *Recyclable materials are collected from households, schools, businesses, or drop-off points.* 2. ***Sorting*** *Materials are separated by type — paper, plastics, metals, glass, and sometimes by specific subcategories (e.g., PET and HDPE plastics).* 3. ***Cleaning and Processing*** *Items are cleaned to remove contamination. They may be shredded, crushed, melted, or compacted into bales.* 4. ***Preparation for Manufacturing*** *Processed materials are sold to manufacturers, who use them as raw materials to produce new goods.* *This process reduces the need to extract virgin resources such as timber, petroleum, or metal ores.* ***Examples of Recycling Centers*** ***1. Municipal Recycling Facility*** *Many cities operate municipal recycling centers where residents can drop off sorted materials. These centers often accept:* • *Paper and cardboard*	

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		• *Plastic bottles and containers* • *Glass bottles and jars* • *Metal cans* *Some also include areas for bulky items like furniture or construction materials.* ***2. Materials Recovery Facility (MRF)*** *A Materials Recovery Facility (MRF) is a more advanced type of recycling center that processes large volumes of mixed recyclables collected from curbside programs. These facilities use conveyor belts, magnets, air classifiers, and optical sorting technology to separate materials efficiently.* ***3. E-Waste Recycling Center*** *Specialized recycling centers handle electronic waste such as:* • *Mobile phones* • *Laptops* • *Televisions* • *Batteries* *These facilities safely extract valuable metals like copper, gold, and aluminum while preventing hazardous substances from contaminating the environment.* ***4. Deposit-Return Recycling Center*** *In some regions, recycling centers operate as part of a deposit-return system. Consumers return beverage cans or bottles and receive a refund. The collected containers are then processed for recycling.* ***Why Recycling Centers Matter*** *Recycling centers play a critical role in sustainable waste management and circular economy systems. They:* • *Reduce landfill use*	

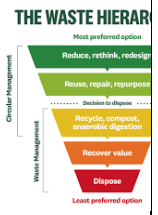
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		• *Conserve natural resources* • *Save energy compared to producing new materials* • *Reduce greenhouse gas emissions* • *Create employment opportunities* *Without recycling centers, even well-sorted waste would have nowhere to go. These facilities transform responsible consumer behavior into measurable environmental benefits.*	
5. Compost bin	Image	A **compost bin** is a container used to collect and naturally decompose organic waste such as food scraps and garden materials. Instead of throwing biodegradable waste into general garbage, a compost bin allows it to break down into compost — a nutrient-rich material that can improve soil health. In simple terms, a compost bin helps return organic matter back to the earth rather than sending it to landfill. **How a Compost Bin Works** Inside a compost bin, microorganisms such as bacteria and fungi break down organic materials in the presence of oxygen. Over time, fruit peels, vegetable scraps, coffee grounds, leaves, and grass clippings decompose and transform into dark, soil-like compost. This process: • Reduces the volume of waste • Prevents methane production from landfills • Produces natural fertilizer • Supports healthier plant growth Composting reflects how nature operates — nothing is wasted; materials continuously cycle back into the ecosystem.	Image full width 

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5. Waste hierarchy	Image	The **waste hierarchy** is a framework that ranks waste management options according to their environmental impact. It guides individuals, institutions, and governments in choosing the most sustainable waste strategies. The hierarchy is usually represented as a pyramid, where the most environmentally beneficial options are at the top and the least preferred options are at the bottom. **Levels of the Waste Hierarchy** **1. Prevention (Reduce)** The most preferred option is preventing waste from being created in the first place. This includes buying only what is needed, choosing durable products, and reducing packaging. **2. Reuse** Extending the life of products through repair, donation, refill systems, or repurposing materials. **3. Recycling** Processing materials such as paper, plastic, metal, and glass into new products. **4. Recovery** Recovering energy from waste that cannot be recycled, for example through waste-to-energy systems. **5. Disposal** Landfilling or incineration without energy recovery. This is the least sustainable option and should be minimized. **Why the Waste Hierarchy Matters** The waste hierarchy encourages a shift away from a linear	Image and text 

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		model of “take–make–dispose” toward more sustainable systems. It prioritizes waste prevention and resource efficiency over disposal. Composting, for example, fits within the hierarchy under: • **Prevention** (reducing food waste generation), and • **Recycling** (biological recycling of organic materials). By following the waste hierarchy, societies reduce environmental harm, conserve resources, and support circular economy principles.	
5. Carousel: mixed waste, recycling bins, compost	Image	**The Carousel System: How it Works** The "Carousel" usually refers to a centralized, rotating waste station designed to save space while maximizing sorting efficiency. Instead of four separate bins taking up a whole hallway, you have one unit with internal compartments. **The Standard Streams:** • **Mixed Waste (Landfill):** This is for non-recyclable items like chip bags, polystyrene (Styrofoam), used tissues, or contaminated food packaging. It's the "last resort" bin. • **Recycling:** Reserved for "clean" materials. Usually includes paper, cardboard, rigid plastics, and metal cans. • **Compost (Organics):** For food scraps, coffee grounds, and BPI-certified compostable packaging. This is diverted to industrial composting facilities to create soil rather than methane in a landfill.	 (Carousel: mixed waste, recycling bins, compost area.jpg)

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5. Local waste management projects	Image	***Innovative Local Waste Projects*** *Cities and organizations are moving beyond just "having bins" and are implementing high-tech or community-driven projects.* ***A. Underground Vacuum Waste (Envac)*** • ***Location Examples:*** *Stockholm, Sweden; Roosevelt Island, NYC; London (Wembley).* • ***The Project:*** *Instead of garbage trucks driving street-to-street, waste is "sucked" through a network of underground pipes to a central collection station. It reduces CO2 emissions from trucks and keeps streets cleaner.* ***B. The "Pay-As-You-Throw" (PAYT) Model*** • ***Location Examples:*** *Seoul, South Korea; San Francisco, USA.* • ***The Project:*** *Residents are charged based on how much* ***mixed waste*** *they produce, while recycling and composting are often free or subsidized. In Seoul, you must buy specific biodegradable bags for food waste, which drastically reduced organic waste levels.* ***C. Precious Plastic Communities*** • ***Location Examples:*** *Global grassroots (e.g., small-scale workshops in the Netherlands or Mexico).* • ***The Project:*** *Using open-source blue-prints, local hubs set up small-scale plastic recycling "factories." They shred, melt, and press local plastic waste into new products like stools, beams, or jewelry, keeping the circular economy local.* ***D. AI-Powered Sorting (AMP Robotics)*** • ***Location Examples:*** *Various Material Recovery Facilities (MRFs) across the UK and USA.* • ***The Project:*** *Using computer vision and robotic arms, these*	

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		projects sort recycling at speeds humans can't match. They can distinguish between a Starbucks cup and a generic paper cup, ensuring higher purity in the recycled bales.	
6. Video & audio	Video	Video: "Introduction to Sustainable Waste Management"	https://www.youtube.com/watch?v=DmFGsxLcT6k
6. Video & audio	Video	https://www.youtube.com/watch?v=DmFGsxLcT6k	https://www.youtube.com/watch?v=DmFGsxLcT6k
6. Video & audio	Audio	https://www.youtube.com/watch?v=DmFGsxLcT6k	Add audio file (file-name.mp3)
7. Files	File	https://www.youtube.com/watch?v=DmFGsxLcT6k	Add file here (file-name.pdf)
8. Accordion and tabs	Accordion	TAB 1: "Types of Waste" – Text + image (waste_types.jpg) TAB 2: "Sustainability Principles" – Text + video (sustainability_principles.mp4)	https://www.youtube.com/watch?v=GSALdyxbSc

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			8
	Accordion	TAB 1: “Community Initiatives” – Text + image (community_project.jpg) TAB 2: “EU Best Practices” – Text + video (eu_best_practices.mp4)	https://www.youtube.com/watch?v=8pxM0_uRzbE
8. Accordion and tabs	Tab	TAB 1 Write header Write text/description	Add image (filename.jpg)
	Tab	TAB 2 Write header Write text/description	Add video file (filename.mp4)
9. Labeled graphic	Labeled graphic	Marker 1: Mixed Waste Bin – Add image (mixed_waste_bin.jpg) Marker 2: Recycling Symbol – Add infographic (recycling_infographic.jpg) Marker 3: Audio Explanation – Add audio (recycling_explained.mp3) Marker 4: Compost Bin – Text: “Organic waste goes here”	
		Marker 1: Mixed Waste Bin – Add image (mixed_waste_bin.jpg) Marker 2: Recycling Symbol – Add infographic (recycling_infographic.jpg) Marker 3: Audio Explanation – Add audio (recycling_explained.mp3) Marker 4: Compost Bin – Text: “Organic waste goes here”	

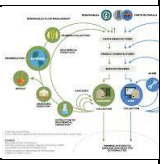
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		Marker 1: Mixed Waste Bin – Add image (mixed_waste_bin.jpg) Marker 2: Recycling Symbol – Add infographic (recycling_infographic.jpg) Marker 3: Audio Explanation – Add audio (recycling_explained.mp3) Marker 4: Compost Bin – Text: "Organic waste goes here"	
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10.Scenario	Scenario	Slide 1: Character: VET student Instructions: "Plan a waste reduction strategy for your school. Each decision affects the scenario outcome."	

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		Slide 3: Closing: “Well done! You successfully applied sustainable waste management principles.”	
		Slide 2: Navigate waste segregation challenges in school	
		Slide 3: Closing: “Well done! You successfully applied sustainable waste management principles.”	
11.Timeline	Timeline	Date 1: 2023 – Introduction of national recycling plan – Add image (national_plan.jpg)	
		Date 2: 2024 – Pilot waste-separation program in VET institutions – Add audio (pilot_program.mp3)	https://www.youtube.com/watch?v=0oDrNQ23C-8
12. Unsorted municipal waste example	Flashcards	In the waste management industry, **Unsorted Municipal Waste (UMW)** is often referred to as "black bag waste" or "commingled trash." It is essentially the raw, mixed output from households and businesses before any separation has occurred. If you don't sort your recycling or compost at home and put everything into one single bin, you are creating Unsorted Municipal Waste. **1. Composition of Unsorted Waste** Because it hasn't been filtered, UMW is a "soup" of materials. A typical bag of unsorted waste in an urban area usually contains:	

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		• **Organics (40–60%):** Food scraps, vegetable peelings, and "green" yard waste. This is the heaviest component due to water content. • **Plastics (10–15%):** A mix of high-value plastics (PET bottles) and "film" plastics (shopping bags, candy wrappers). • **Paper & Cardboard (10–20%):** Everything from junk mail and newspapers to greasy pizza boxes. • **Inerts & Others (10%):** Glass shards, stones, dust, and "fines" (tiny particles of various materials). • **Hazardous "Contaminants":** This is the biggest problem in unsorted waste—batteries, light bulbs, or leftover household chemicals that leak and contaminate the recyclable paper and plastic. **2. Examples of Management Challenges** When waste is unsorted, it limits the options for what can be done with it. Here is how it is typically handled: **The "Dirty" MRF (Material Recovery Facility)** Unlike a "Clean" MRF (which processes pre-sorted recycling), a **Dirty MRF** accepts raw, unsorted trash. • **The Process:** Machines use "bag breakers" to rip open the bags. Then, giant rotating drums (trommels), magnets, and optical sensors try to pull out recyclables from the mess. • **The Problem:** Because the food waste has usually smeared onto the paper and plastic, the "recovery rate" is low. You might only save 20% of the recyclables; the rest is too "dirty" to be sold to factories. **Mechanical Biological Treatment (MBT)**	

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		This is a common "local project" style for cities that don't have high household sorting rates. • **The Project:** The waste is shredded and put through a biological phase (like composting or anaerobic digestion) to stabilize the organic part. • **The Result:** The remaining "dried" waste is often turned into **RDF (Refuse Derived Fuel)**—pellets that are burned in cement kilns or power plants.	
		Flashcard 2: Front: Image (recycling_symbols.jpg), Back: Image (compost_bin.jpg)	
		Flashcard 3: Front: Text: "Waste Hierarchy", Back: Image (waste_hierarchy.jpg)	
13. Multiple choice and multiple response	Multiple choice	Question 1: Which is a principle of sustainable waste management? Answer 1: Reduce, Reuse, Recycle Answer 2: Burn all waste Feedback accordingly	Answer 1: Reduce, Reuse, Recycle
13. Multiple choice and multiple response	Multiple answer	Question 1: Which actions reduce environmental impact? Answer 1: Proper waste separation Answer 2: Using disposable plastics Answer 3: Composting	Answer 1: Answer 3:
14. Matching and fill in the blank	Matching	Plastic / Recycling Bin Food Waste / Compost Bin Paper / Recycling Bin	

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14. Matching and fill in the blank	Fill in the blank	Organic waste such as fruit and vegetable scraps can be placed in a _____bin.	Specify here the missing word or words. **Compost**

Module 1: Introduction to Sustainable Waste Management			
Unit 2: Waste Hierarchy and Circular Economy	**Content type**	**Content development**	**Notes**
	Paragraph/Heading	This module provides an in-depth understanding of the waste hierarchy and circular economy. Students explore waste minimization through prevention, reuse, recycling, and recovery while transitioning from linear "take–make–dispose" systems to sustainable circular models.	Focus on systems thinking in waste management
Waste hierarchy	Paragraph/Sub-heading	**The Waste Hierarchy Explained** The waste hierarchy is a framework that prioritizes waste management options according to environmental impact. It promotes prevention as the most preferred option and disposal as the last resort. **Levels of the Waste Hierarchy:** 1. Prevention (Reduce) – Avoid creating waste 2. Reuse – Extend product life 3. Recycle – Convert waste into new materials 4. Recovery – Recover energy from waste 5. Disposal – Landfilling or incineration without energy recovery Learners analyze real-life examples from schools, households, and businesses.	

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Circular economy	Paragraph	**From Linear to Circular Systems** The transition from **linear production systems** to more sustainable resource use is a key response to growing environmental challenges. Traditional waste management has often followed a **linear economic model**, sometimes described as the *"take–make–dispose"* approach. In this system, raw materials are extracted from nature, transformed into products through manufacturing processes, used by consumers, and ultimately discarded as waste after their useful life. While this model supported industrial growth, it has contributed to resource depletion, increased landfill accumulation, and higher environmental pollution. In contrast, the **circular economy** represents a transformative shift in how societies design, produce, and consume goods. Inspired by sustainable development thinking promoted by organizations such as the Ellen MacArthur Foundation, the circular economy aims to keep resources in continuous circulation within economic and ecological systems. Instead of viewing products as having a single life cycle, circular systems treat materials as valuable assets that can be maintained, reused, and regenerated over time. The circular economy model follows a **closed-loop resource system**, summarized as **Design → Use → Reuse → Repair → Recycle → Regenerate**. The process begins with sustainable design, where products are created with durability, recyclability, and minimal environmental impact in mind. During the use phase, consumers are encouraged to maximize product functionality and lifespan. When prod-	Improper waste management harms soil, water, and air quality and poses health risks. Sustainable practices protect the environment and support circular economy goals.

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		ucts begin to wear out, reuse and repair options help extend usability and reduce unnecessary consumption. Recycling remains an important stage, allowing materials to be processed into new products rather than being disposed of as waste. Beyond recycling, the concept of regeneration emphasizes restoring natural ecosystems and supporting environmental recovery. This principle is particularly important for resources such as soil, forests, and water systems, where sustainable management practices can enhance biodiversity and ecosystem resilience. **Key Principles of Circular Economy** 1. **Designing Out Waste and Pollution** Products and systems should be planned in ways that minimize waste generation from the beginning. This includes using eco-friendly materials, simplifying product structures for easier disassembly, and reducing harmful chemical inputs. 2. **Keeping Materials in Use** Resources should circulate within production and consumption cycles for as long as possible. Strategies such as sharing platforms, product leasing, refurbishment, and remanufacturing help maintain material value. 3. **Regenerating Natural Systems** Circular economy thinking goes beyond waste reduction by actively supporting environmental restoration. Sustainable agricul-	

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		ture, responsible forestry, and water conservation practices help rebuild natural capital and maintain ecological balance. **Educational Importance** Understanding circular economy concepts helps learners develop sustainability-oriented thinking, supports innovation in waste management, and prepares individuals to participate in green economic systems. By adopting circular practices, communities can reduce environmental pressure while promoting long-term economic and social well-being.	
Benefits of Circular Economy	Note	Benefits of the Circular Economy The adoption of circular economy principles brings significant advantages across environmental, economic, and social dimensions of sustainable development. International sustainability organizations, including the United Nations Environment Programme, emphasize circular resource management as a key strategy for achieving long-term ecological balance and sustainable prosperity. Environmental Benefits One of the most important advantages of the circular economy is the reduction of environmental pressure caused by waste accumulation. By promoting waste prevention, reuse, and recycling, circular systems significantly decrease the amount of waste sent to landfills. Reduced landfill dependency helps prevent soil and groundwater contamination while also minimizing landscape degradation. Circular economy practices also contribute to the reduction of greenhouse gas emissions. Waste decomposition in	

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		landfills releases methane and other harmful gases that contribute to climate change. By extending product lifecycles and promoting material recovery, the demand for new raw material extraction is reduced, resulting in lower energy consumption and reduced industrial emissions. Another major environmental benefit is the conservation of natural resources. Sustainable material use helps protect forests, minerals, water resources, and biodiversity. When products are reused or recycled, fewer virgin materials are extracted from nature, supporting ecosystem preservation and long-term environmental stability. Economic Benefits From an economic perspective, circular economy systems improve resource efficiency by maximizing the value obtained from materials and products. Businesses and institutions can reduce operational costs by minimizing material waste and optimizing production processes. The circular economy also promotes the development of green industries and employment opportunities. Sectors such as recycling technology, sustainable product design, repair services, and resource recovery create new types of jobs that support environmentally responsible economic growth. In addition, institutions such as schools, businesses, and local organizations can achieve significant cost savings by reducing waste disposal fees and promoting material reuse. Investment in durable products and sustainable infrastructure often results in long-term financial benefits. Social Benefits	

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		Circular economy implementation contributes to the creation of cleaner and healthier communities. Proper waste management reduces environmental pollution, improves public health conditions, and enhances the overall quality of life. The circular economy also increases environmental awareness among citizens. Educational programs and community engagement activities encourage responsible consumption habits and sustainability-oriented lifestyles. Furthermore, circular systems stimulate innovation. Researchers, businesses, and educational institutions are motivated to develop new technologies, sustainable materials, and creative product solutions that support resource conservation and environmental protection. Overall, the circular economy supports a balanced relationship between human development and environmental stewardship by integrating sustainability into economic and social systems.	
Roles and Responsibilities	Columns	**Stakeholders and Roles:** • Individuals – conscious consumption, repair products, correct waste sorting • Businesses – eco-design and extended producer responsibility • Municipalities – infrastructure and enforcement • Educational institutions – awareness and innovation promotion	

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Interactive Table: Waste Hierarchy Examples	Table	Waste Hierarchy Reduce Reuse Recycle Recover Dispose	
	Divider	By default, dividers are labeled as CONTINUE, but you can customize this label as needed.	
4. School Waste Chart	Chart	Food Waste = 45% Paper Waste = 25% Plastic Waste = 20% Other Waste = 10%	Use a pie chart Demonstrates waste sources in educational institutions
5. Waste hierarchy	Image	Waste hierarchy infographic with text	Image and text 
5. Local waste management projects	Image	*Grid of 3 images showing local waste management projects*	
6. Video & audio	Video	Video: "Introduction to Circular Economy"	Video: Introduction to Circular

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			Economy (https://www.youtube.com/watch?v=DyIB0lUfGDo)
6. Video & audio	Video	Video: Introduction to Circular Economy (https://www.youtube.com/watch?v=DyIB0lUfGDo)	Video: Introduction to Circular Economy (https://www.youtube.com/watch?v=DyIB0lUfGDo)
6. Video & audio	Audio	https://www.youtube.com/watch?v=DmFGsxLcT6k	
7. Files	File	https://www.youtube.com/watch?v=DmFGsxLcT6k	
10.Scenario	Scenario	Slide 1: Character: VET student Instructions: "Plan a waste reduction strategy for your school. Each decision affects the scenario outcome." Slide 3: Closing: "Well done! You successfully applied sustainable waste management principles."	
		Flashcard 3: Front: Text: "Waste Hierarchy", Back: Image (waste_hierarchy.jpg)	
13. Multiple choice and multiple response	Multiple choice	Question 1: Which is a principle of sustainable waste management? Answer 1: Reduce, Reuse, Recycle	Answer 1: Reduce, Reuse, Recycle

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		Answer 2: Burn all waste Feedback accordingly	
13. Multiple choice and multiple response	Multiple answer	Question 1: Which actions reduce environmental impact? Answer 1: Proper waste separation Answer 2: Using disposable plastics Answer 3: Composting	Answer 1: Answer 3:
14. Matching and fill in the blank	Matching	Plastic / Recycling Bin Food Waste / Compost Bin Paper / Recycling Bin	
14. Matching and fill in the blank	Fill in the blank	"The circular economy aims to design out _____ and pollution."	Answer: Waste

Module 1: Introduction to Sustainable Waste Management			
Unit 3: Waste Management Systems, Policies and Local Implementation	**Content type**	**Content development**	**Notes**
Unit 3: ***Waste Management Systems, Policies and Local Implementation***	Paragraph/Heading	This unit explores how waste management systems function at local, national, and international levels. It introduces institutional planning, legal frameworks, and community implementation approaches, with contextual relevance to Albania and Kosovo while aligning with European sustainability standards.	
Waste Management Systems	Paragraph/Subheading	**Components of a Waste Management System** A sustainable waste management system is a coordinated process that ensures materials are handled safely from generation to final treatment. According to the United Nations Environment Programme, integrated waste manage-	

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		ment supports environmental protection and resource efficiency. Key components of a waste management system include: • Waste generation monitoring • Collection and transport infrastructure • Sorting and separation facilities • Material recycling plants • Composting and biological treatment units • Controlled landfills and energy recovery facilities Municipalities are responsible for organizing these services, ensuring accessibility, and maintaining environmental safety standards.	
National Policies and EU Alignment	Paragraph	**Legal and Policy Framework** Sustainable waste governance is guided by national legislation and international environmental agreements. Students examine national waste strategies, municipal waste management plans, and extended producer responsibility mechanisms. Alignment with European sustainability standards is particularly important for countries aspiring to strengthen environmental governance. The circular economy and waste management principles promoted by the European Union emphasize waste prevention, recycling targets, and resource recovery. These policies support modern sustainable development objectives. Learners compare waste management approaches and regulatory standards across Albania, Kosovo, and European Union frameworks. Waste management is an important environmental and public health issue in the Western Balkans. Both Kosovo and Albania are working to improve their waste management systems as part of broader environmental protection and European integration efforts. However, their	

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		strategies reflect different development priorities and institutional capacities. In Kosovo, waste management strategy mainly focuses on improving basic collection services and reducing illegal dumping. Historically, waste disposal was characterized by uncontrolled landfills and insufficient municipal coverage. Recent policies aim to expand organized waste collection to rural areas and upgrade regional landfill systems. For example, the regional landfill near Pristina, often associated with the Mirash area, serves several municipalities and represents an effort to centralize waste disposal. In addition, small-scale recycling initiatives are emerging, particularly for packaging materials such as plastic, paper, and metal. Many of these programs are supported by non-governmental organizations that promote environmental awareness and community participation. Despite these efforts, recycling rates remain relatively low due to limited sorting infrastructure and public engagement challenges. Albania has adopted a more infrastructure-oriented waste management strategy. The country has invested in sanitary landfills and environmental protection projects, especially to address urban and coastal pollution. Tourism development along the Adriatic and Ionian coasts has encouraged stronger environmental regulation. One example is the Bushat regional landfill near Shkodër, which was developed to improve controlled waste disposal. In major cities such as Tirana, municipal authorities have introduced public campaigns and container systems encouraging separation of waste into categories such as plastic,	

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		glass, and organic materials. International cooperation projects have also supported improvements in wastewater treatment and solid waste processing facilities. When comparing the two countries, Albania generally places more emphasis on large-scale infrastructure development, while Kosovo prioritizes expanding collection coverage and establishing basic recycling practices. Both countries face challenges including limited recycling markets, informal waste disposal activities, and enforcement difficulties. Public participation in waste separation remains moderate in Albania and relatively low in Kosovo. In terms of EU alignment the following is completed: Kosovo's harmonization process focuses on adopting EU-style environmental legislation, improving institutional capacity, and developing basic waste infrastructure. The country is gradually aligning its waste management laws with EU directives on landfill control, recycling targets, and pollution prevention. Implementation, however, remains a challenge due to limited financial resources, weak enforcement mechanisms, and underdeveloped recycling markets. Progress is mainly seen in regulatory reform and international cooperation projects. Albania has made more advanced progress in legislative harmonization. The country has adopted several EU-aligned environmental laws covering solid waste treatment, landfill standards, and urban pollution control. Albania is also investing in sanitary landfills, coastal environmental protection, and waste separation systems to meet	

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		European environmental requirements. Despite stronger policy alignment, practical implementation still faces obstacles such as regional service inequality and limited recycling industry development.	
Institutional Waste Management Planning	Note	**Developing a Waste Management Plan** Institutional waste planning helps organizations systematically reduce environmental impact. The process includes: 1. Conducting waste assessment and baseline measurement 2. Identifying major waste streams generated by the institution 3. Setting measurable waste reduction targets 4. Designing separation and storage systems 5. Implementing awareness and education campaigns 6. Establishing monitoring, evaluation, and reporting mechanisms Schools and vocational education institutions are encouraged to develop practical sustainability management models. Waste management planning in Kosovo and Albania is gradually evolving as both countries work toward more sustainable environmental practices and better public service systems. The development of waste management plans in these countries reflects their economic transition, urban growth, and aspiration to meet European environmental standards. In Kosovo, waste management planning is still in a relatively early stage of development. The main priority has been to establish basic and reliable waste collection services across municipalities. Authorities have been working to reduce the number of illegal dumping sites and im-	

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		prove the management of regional landfills. Urban centres, especially Pristina, receive more attention because higher population density produces larger volumes of municipal waste. Efforts are also being made to introduce waste separation at the source, particularly for packaging materials such as plastic, paper, and metal. Much of the progress in Kosovo has been supported by international projects and environmental organizations that help strengthen technical and institutional capacity. The long-term objective is to move beyond simple waste disposal and develop a more integrated system that includes recycling and resource recovery. In Albania, waste management planning is slightly more advanced in terms of infrastructure investment and legislative development. The country has focused on building sanitary regional landfills and improving environmental protection, especially along its coastal areas where tourism is economically important. Cities such as Tirana have introduced public awareness campaigns and container-based separation systems to encourage citizens to sort waste. Albania has also benefited from international cooperation and public–private partnerships that support the construction and modernization of waste treatment facilities. The planning approach in Albania is strongly connected to protecting natural resources and supporting sustainable tourism development. Despite these efforts, both countries still face common challenges. Recycling industries are not yet fully devel-	

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		oped, informal waste collection activities exist in some areas, and public participation in waste sorting remains limited. Financial constraints and uneven enforcement of environmental regulations also slow the implementation of national waste plans. Overall, waste management planning in Kosovo and Albania is moving gradually from basic disposal systems toward more sustainable and environmentally responsible models. While Albania shows relatively stronger infrastructure development, Kosovo is still focusing on building foundational services. Both countries continue working toward alignment with European Union environmental and sustainability standards.	
	Scenario	Students analyze real institutional waste challenges such as: • Lack of separation infrastructure • Low environmental awareness among users • Inadequate monitoring systems • Limited budget for sustainability programs **Problem Analysis Task:** • Review current waste practices • Identify behavioral and infrastructure barriers • Design an improvement proposal	
6. Video & audio	Video	Waste management video	https://www.youtube.com/watch?v=H0TRvujYjQ8
7. Files	File	https://www.youtube.com/watch?v=H0TRvujYjQ8	
9. Practical learning		Develop a Waste Management Plan for a VET institution • Map local waste collection and recycling infrastructure • Conduct stakeholder interviews (municipal officer or	

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		waste company) • Design awareness campaigns promoting segregation	
10.Scenario	Scenario	**Slide 1:** Municipality introduces new waste regulation policies **Slide 2:** School must adapt waste management system with limited financial resources **Slide 3:** Students select cost-effective sustainable solutions and evaluate outcomes	
13. Multiple choice and multiple response	Multiple choice	**Question:** Which actors are responsible for sustainable waste management? Options: • Individuals • Municipal authorities • Businesses and industries • Only environmental inspectors	**Correct Answer:** Individuals, Municipalities, Businesses

5 Activities (examples)

Module 1: Introduction to Sustainable Waste Management			
All 3 Units:	**Activity type**	**Activity development**	**Notes**
Flashcards	Flashcards	**Flashcard 1** **Front:** Image of mixed waste bin **Back:** This is an example of unsorted municipal waste. Proper separation reduces environmental impact	
Flashcards	Flashcards	**Flashcard 2** **Front:** Image of recycling symbols **Back:** Image of composting bin	

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			Recycling_symbols.jpg / 
Flashcards	Flashcards	Flashcard 3 Front: What is the waste hierarchy?" Back: The waste hierarchy pyramid (Reduce, Reuse, Recycle, Recover, Dispose)	
Multiple choice and multiple response	Multiple choice	Question 1 [Which of the following is a principle of sustainable waste management?] Answer 1 Reduce, Reuse, Recycle Feedback: [Correct! These are the core principles of waste management.] Answer 2 [Burn all waste] Feedback: [Incorrect. Burning waste is not sustainable]	Answer 1.
Multiple choice and multiple response	Multiple answer	Question 1 [Which of the following can help reduce environmental impact?] Answer 1: Proper waste separation Feedback: Correct, separating waste reduces contamination and improves recycling. Answer 2: Using disposable plastics Feedback: Incorrect, this increases environmental harm. Answer 3: Composting organic waste	Answer 1 and Answer 3

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		Feedback: Correct, composting turns waste into useful material.	
Matching and fill in the blank	Matching	First choice / First match: Plastic / Recycling bin Second choice / Second match: Food waste / Compost bin Third choice / Third match: Paper / Recycling bin	
Matching and fill in the blank	Fill in the blank	"The principle of the waste hierarchy is: Reduce, ____, Recycle, Recover, Dispose."	Missing word: Reuse
Digital map	Digital map	Students create a digital map showing local recycling points, waste collection centers, and composting sites in their community.	
Design of a small waste-separation system within the institution		Design of a small waste-separation system within the institution	Use Google My Maps or similar tools
Digital simulation		**Lifecycle Analysis (LCA):** A digital simulation tracing a container from raw material extraction to disposal/recycling.	
Digital awareness	**Campaign Creation:** View infographics on waste impact, then use digital tools to create awareness posters or short social media clips.	Use Canva, Piktochart, or simple video editors	Digital awareness
Hackathon	Organize a mini hackathon where learners work in teams to develop	**Innovation Challenge:** A mini-hackathon where teams develop creative tech or social solutions for local waste reduction Can be 1–2 day activity; judged on creativity, feasibility, and sustainability	Hackathon

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	creative solutions for waste reduction or recycling in their institution or community.		
Waste audit		**Classroom Waste Audit** activity. This is designed to be a 2-hour practical session that can be integrated into Module 1 or 2.	Waste audit

6. Methodology

5.1. Project-Based Learning (PBL) and collaborative Learning	Students work in groups on practical projects related to waste management, such as waste audits, recycling plans, or awareness campaigns. This approach promotes problem-solving, teamwork, and the application of knowledge to real-life situations.
5.2. Collaborative learning between institutions in Albania and Kosovo	The module encourages cooperation between VET institutions in Albania and Kosovo through joint activities, shared learning materials, and online exchanges. This cross-border collaboration promotes knowledge sharing, cultural exchange, and the adoption of best practices in sustainable waste management.
5.3. Blended Learning	The unit combines face-to-face teaching with online learning activities. Classroom sessions are supported by digital materials, videos, and online assignments, allowing flexible and inclusive learning.
5.4. Online and mobile Learning tools	Students use simple digital tools, mobile applications, and online platforms to access learning materials, conduct basic research, and communicate with peers and trainers.
5.5. Real case studies	Real examples from Albania, Kosovo, and Balkan region are used to illustrate

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	waste management challenges and solutions. Case studies help learners understand practical applications and local realities.
5.6. Visits to companies in the sector	Organized visits to waste management, recycling, or environmental service companies allow learners to observe real working environments, technologies, and professional practices.
5.7. Workshops and experiential learning	Hands-on workshops and practical exercises enable learners to gain direct experience with waste sorting, recycling processes, and sustainable practices.
5.8. Community based and participatory approaches	Learners engage with local communities through awareness activities, clean-up actions, or surveys. This approach strengthens social responsibility and encourages active participation in sustainable waste management.

7. Resources

Learning Materials

- Training manuals and handbooks on sustainable waste management
- Teacher-prepared presentations and worksheets
- Short educational videos and infographics on waste reduction and recycling

Digital Resources

- Online learning platforms (e.g. Moodle, Google Classroom)
- Mobile applications related to recycling, waste sorting, or environmental awareness
- Open Educational Resources (OERs) on sustainability and circular economy

Policy and Reference Documents

- National waste management strategies and regulations (Albania/Kosovo)
- EU waste framework directives and sustainability guidelines
- Municipal waste management plans and reports

Practical Resources

- Case studies from local municipalities or companies
- Simple tools for waste audits or waste sorting demonstrations
- Recycling bins, posters, and visual aids

External Stakeholders

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- Local waste management and recycling companies
- Municipal environmental departments
- NGOs and civil society organizations active in environmental protection

8. Assessment criteria

8.1. Use of Digital Tools
Students are assessed on their ability to use basic digital tools to support learning and project work. This includes searching for information online, preparing simple documents or presentations, and communicating through digital platforms. **Examples of tools:** word processors, presentation software, online learning platforms, basic mobile applications.

8.2. Understanding of the Sustainability Framework
Learners demonstrate understanding of key sustainability concepts, including the waste hierarchy and environmental responsibility. Assessment focuses on their ability to explain sustainability principles and apply them to waste management situations relevant to their institution or community.

8.3. Ability to Implement Real Improvements
Students are evaluated on their capacity to propose or carry out simple, practical improvements in waste management. This may include waste separation actions, awareness activities, or recommendations that can realistically be applied in the VET institution.

8.4. Final Product: Waste Management Plan for the VET Institution
The main assessment output is a group or individual waste management plan for the learners' VET institution. The plan is assessed based on:

- Identification of current waste issues
- Proposed sustainable solutions
- Practical feasibility and clarity
- Use of sustainability principles

8.5. Self- and Co-Assessment
Students reflect on their own learning and assess group members' contributions. This criterion focuses on participation, collaboration, responsibility, and the ability to give and receive constructive feedback.

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9. Inclusion of the EU/transnational perspective

The module includes a comparison of waste management practices in Albania, Kosovo, and EU countries, focusing on the EU waste hierarchy and circular economy principles. In **Kosovo**, the narrative is shifting toward responsibility and modernization. Under the **Integrated Waste Management Strategy 2021–2030**, the country is working hard to replace old, unmanaged dumpsites with regional centers that meet strict EU safety standards. It's about more than just infrastructure; it's about a **Green Agenda** that seeks to decarbonize our economy and turn waste into a resource through regional cooperation.
Across the border in **Albania**, the story is deeply tied to the land and the sea. With a focus on the **National Integrated Waste Management Plan 2020–2035**, there is a specialized effort to protect the tourism industry—the heartbeat of the coastal economy. Whether it is using "trash booms" to stop plastic from flowing down rivers into the sea or improving public awareness in coastal cities, the goal is clear: preserving Albania's natural assets for future generations.

Bridging the Gap: The EU Perspective
When we look at **EU countries**, we see a "benchmark" of what is possible through gradual improvement. The European perspective emphasizes a strict **Waste Hierarchy**, where the best waste is the kind that is never created (Reduce and Reuse). By comparing our local practices in Albania and Kosovo to these standards, we aren't just looking at differences; we are identifying **good practices** that we can adapt to our own unique conditions.

- **Realistic Alignment:** We aren't trying to change everything overnight. The focus is on **gradual improvements** in how we separate waste at home, how we recycle, and how we talk about waste in our communities.
- **Regional Cooperation:** By working together across borders, Kosovo and Albania are supporting **EU integration goals**, proving that environmental protection is a shared language.
- **Public Awareness:** The most human element of this journey is us. The success of these projects depends on shifting public habits so that waste separation becomes a natural part of daily life.

Students analyse key differences and identify good practices from the EU that can be adapted to local conditions. Emphasis is placed on realistic alignment with European standards through gradual improvements in waste separation, recycling, and public awareness, supporting regional cooperation and EU integration goals.

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1.1. Unit information

Unit title	Digital Tools for Environmental Learning
This unit is part of…	Standalone course EQF 5
Prerequisites (if any)	N/A

1.2. Justification and objectives of the Teaching Unit

The use of digital tools allows to amplify the comprehension of the natural environment through real data, immersive experiences and citizen engagement. This unit´s purpose is to answer the necessity to integrate new and upcoming technologies into the environmental education to promote sustainability, digital alphabetization and critical thinking.
In this manner, a series of improvements will be developed in the target group:

- Applied digital skills
- Professional environmental awareness
- Environmental analysis capability
- Increase in better sustainable employability opportunities

1.3. Contextualization of the issue in the country (Albania or Kosovo)

The use of digital tools in Albania is growing, specially those linked to education, European cooperation and digital and ecological transition, however there is still a scope for development in rural areas and in VET.

On the other hand, the use of digital tools within the VET system in Kosovo is being progressively integrated in order to improve the student´s natural comprehension of the natural environment, sustainable resource management and their acquisition of digital and ecological skills.

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1.3. Expected results in terms of teaching practices

Once the development of this unit is finished, the participants will be able to:

- Identify and choose pertinent digital tools for the observation, analysis and communication of environmental phenomena in VET educational contexts.
- Gather and manage environmental data using sensors, digital platforms and mobile applications, thus guaranteeing the basic reliability of the collected data.
- Analyze environmental data through analysis and visualization digital tools with the aim of interpreting the impact of different environmental phenomena.
- Create digital content (infographics, interactive maps, videos or story maps) to communicate environmental information in a clear manner and adapted to different public.
- Use collaborative online methodologies and digital collaborative tools in order to develop environmental projects in teams.
- Design and present a digital environmental mini-project, integrating data collection tools, and digital analysis and communication within a VET context.

1.4. Connection with the objectives of the WARP Project

This unit is linked with the project based on the development of innovative digital skills related to the current environmental and sustainability standards. In this manner, VET in Albania and Kosovo will make adapted material available to these environmental needs, mostly related to practices concerning waste management and recycling.
One of this project´s objectives is to improve the existing programs in the partner VET institutions and to provide the trainers with the professional skills and necessary knowledge to innovate and implement effective waste management and recycling practices, which will be achieved with the development and implementation in this unit.

2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	• Comprehension of the impact of waste on the natural and urban environment. • Implementation of sustainable waste management and recycling practices.

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	• Promotion of prevention measures, reutilization and recycling through digital solutions. • Environmental responsibility in the professional performance.
Description of the Learning Outcomes related to this competence	• Understands the waste impact in the natural and urban environment, analyzing data through digital tools and proposing sustainable solutions aligned with the circular economy. • Applies sustainable practices of waste management and recycling using digital tools, according to the environmental regulations and the principles of the circular economy. • Analyzes the real needs within educational, community and business contexts and uses digital tools (collaborative platforms, applications, information systems, digital content) in order to raise awareness, optimize processes and promote sustainable behavior, contributing to the environmental and social improvement. • Acts in a responsible and ethical manner to the professional performance, integrating environmental protection criteria, efficient use of resources and sustainable waste management within the activities attached to their professional profile. • Recognizes the impact of their work activity in the natural and urban environment and adopts sustainable behaviors, using digital tools as support in order to comply the environmental regulations, improve the production processes and actively contribute to the circular economy objectives and its ecological transition.
Description of the evaluation criteria	• To identify and classify the principal types of waste produced in urban and natural contexts in compliance with the current environmental regulations. • To explain and evaluate the environmental and social impact caused by an inadequate waste management.

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	• To link the waste generation and management with the urban and natural context, taking into consideration factors like the population density, the economic activity and the soil use. • To show a responsible, critical and ethical attitude towards the waste issue and its impact in the environment. • To analyze and interpret environmental data related to the waste management through basic digital tools. • To interpret cartographic and visual information (maps, graphics, images) in order to localize critical points of waste generation or accumulation. • To record, control and digitally monitor the waste management (volumes, frequency and destination). • To detect inefficiencies or incidents in the waste management processes through the digital data analysis. • To evaluate the environmental impact of the management practices applied, justifying the environmental benefits obtained based on data. • To correctly apply waste separation, classification and recycling procedures, assessing their technical and environmental feasibility. • Implementar prácticas de reducción, reutilización y uso responsable de materiales, energía y recursos en actividades formativas o productivas. • To implement the reduction, reutilization and responsible use of materials, energy and resources in formative and productive activities. • To apply the principles of circular economy in order to assess sustainable alternatives in the waste management. • To propose and implement sustainable improvements in the work processes from a professional perspective. • To propose corrective measures or improvements in order to reduce the environmental impact caused by waster, based on data and digital tools use. • To select and utilize adequate digital tools to promote sustainable practices (apps, platforms and digital content)

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	• To propose digital initiatives of reutilization, interchange or prolongation of useful life of products and materials. • To apply accessibility, clarity and usability criteria to the proposed digital solutions. • To communicate and document the results of the environmental analysis and the sustainable practices carried out in a clear, structured, and responsible manner, using digital support. • To develop digital content focused on the awareness about recycling and circular economy adapted to the purposed public. • To communicate incidents and good environmental practices in a clear and responsible manner. • To work in a collaborative manner, using digital tools for the co-creation of sustainable solutions. • To actively collaborate in the deployment of sustainable measures in the work context. • To act with environmental responsibility; showing compromise, proactivity and ethical coherence with their daily professional behavior.

2.2. Digital competencies

Description of the competence	• Search and management of digital environmental information. • Use of specific software • Treatment and visualization of data related to waste and recycling. • Responsible and safe use of digital tools • Digital communication of results
Description of the Learning Outcomes related to this competence	• Searches, chooses and manages environmental information proceeding from reliable sources, related to the waste generation, management and recycling, applying quality, timeliness and relevance criteria. • Use of specific software and basic digital tools based on the registry, control and

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	monitoring of data linked to the waste management. • Treatment and analysis of environmental analysis related to waste and recycling through spreadsheets, apps and digital platforms, identifying patterns, incidents and inefficiencies in the management processes. • Represents and visualizes environmental data through graphics, tables, maps or other digital resources, facilitating the information interpretation and critical points identification on waste generation or accumulation. • Applies the safety, data protection and ethics criteria of the digital tools in the environmental information treatment, adopting a responsible and professional attitude in digital contexts. • Prepare and digitally communicate the results of the environmental analysis, using media and formats appropriate to the target audience, with clarity, structure, and technical rigor. • Integrates digital tools in the collaborative work, sharing information and results in an effective manner for the co-creation of proposals to improve the sustainable waste management.
Description of the evaluation criteria	• Identification of reliable and updated digital resources about waste and recycling. • Selection of relevant information applying criteria of quality, rigor and relevance to the stated objective. • Organization and storage of the environmental information in a structured manner through digital tools. • Correct use of applications or specialized software for waste data recording. • Using correct digital tools for the control and monitoring of waste volume, frequency and destination. • Performing calculations, comparisons, or data grouping to facilitate analysis. • Interpretation of the results obtained related to the generated environmental impact.

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	• Representing data through graphics, tables, maps or other adequate digital resources. • Presenting information in a clear, comprehensible and structured manner. • Applying of basic digital safety norms in the use of tools and platforms. • Respect to the data protection and the confidentiality of the managed information. • Elaboration of reports, presentations and other digital media that gathers the results of the previous analysis.

2.3. Pedagogical competencies

Description of the competence	• Identify and classify waste using digital tools. • Apply digital tools to track waste flows and recycling processes. • Assess the environmental impacts of waste management using data and basic simulations. • Prepare digital technical reports on waste management and recycling.
Description of the Learning Outcomes related to this competence	• Identify and classify the different types of waste generated in urban and industrial settings, using digital tools for their recording and organization. • Apply digital tools to monitor and control waste flows and recycling processes, recording data on quantities, frequency, and destination. • Assess the environmental impacts associated with waste management through data analysis and the use of basic digital simulations, interpreting the results obtained. • Prepare digital technical reports on waste management and recycling, presenting the information clearly, in a structured manner, and appropriate to the professional context
Description of the evaluation criteria	• Correctly identify and classify the different types of waste according to their origin, typology, and applicable regulations. • Use appropriate digital tools to record and organize information about the identified waste.

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	• Record data in an organized, accurate, and coherent manner. • Select suitable digital tools for monitoring waste flows. • Monitor recycling processes through the systematic use of digital tools. • Analyze environmental data related to waste management using basic digital tools. • Correctly interpret the results obtained, linking them to the environmental impact generated. • Prepare digital technical reports that comprehensively present the analyzed information.

3. Learning outcomes

By the end of this course, students should be able to:

	Knowledge	**Skills**	**Competences**
LO1	Knowledge about types of digital tools used for the recollection of environmental data.	To choose and use digital tools to record and organize data	Digital competences applied to the environmental context.
LO2	Knowledge about different environmental data analysis and visualization methods	To analyze and interpret environmental data using digital tools.	Competence in analysis and interpretation of data for sustainable decision taking
LO3	Knowledge about different types and principles of digital content on environmental communication	To create clear digital content and adapt it to the targeted public.	Competence in digital environmental communication and dissemination
LO4	Planning and development of digital environmental projects	To integrate digital tools to gather, analyze and communicate data in teams.	Competence in collaborative work and environmental project management in a VET context

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4. Teaching contents of the Unit *(the following are proposals for the content of the unit)*

Module 1: Principios de aprendizaje ambiental.			
Module number & title	**Content type**	**Principles of environmental learning.**	**Notes**
1.1	Paragraph/Heading	**Principles of environmental learning.**	
	Paragraph	The principles of environmental learning are a group of pedagogical approaches that focus the design and development of educational experiences on understanding, analyzing and managing the natural resources in a sustainable way, thus promoting the critical thinking, the informed decision making and the responsible action. In a VET context, these principles are based in a practical, contextualized and collaborative learning approach, integrating digital tools for the observation, analysis and communication of environmental information, linked to learning in real-life situations within the work context. **Systemic and interconnected approach** Applying a systemic and interconnected approach allows environmental problems to be understood as part of complex ecosystems, rather than isolated events. Using digital tools such as maps, graphs, and dashboards, learners can visualize relationships and trends, promoting a comprehensive understanding of environmental systems. **Critical thinking and informed decision-making** Environmental learning fosters analytical and decision-making skills, drawing on environmental data with the following objectives: • Identify real environmental problems • Assess the impacts of different phenomena or actions	

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		• Compare scenarios and predict the consequences of possible decisions **Education for sustainability and action** Environmental education geared toward sustainability and action promotes responsibility, behavioral change, and active participation. Environmental communication is used as a tool for raising awareness, reinforcing the connection between learning and practical action.	
1.2	Paragraph/Heading	**Environmental challenges in Kosovo & Albania (regional context).**	
1.2	Paragraph	The use of digital tools in Albania is expanding, particularly in relation to education, European cooperation, and the green and digital transition, although there is still room for development in rural areas and in vocational training. In Kosovo's vocational training system, digital tools are gradually being integrated to improve students' understanding of the natural environment, sustainable resource management, and the acquisition of green and digital skills.	
1.3	Paragraph/Heading	**Benefits of incorporating digital tools.**	
1.3	Paragraph	The incorporation of digital tools in the management of resources in Vocational Education and Training (VET) brings key benefits for improving efficiency, transparency, and the employability of students in Albania and Kosovo. First, digital technologies optimize the use of material and energy resources, facilitating the monitoring of consumption, inventories, and waste, which helps to reduce costs and waste in workshops and training centers. In addition, the use of digital tools promotes more sustainable management, in line with the objectives of the green and digital transition, which are increasingly relevant in the modernization processes of VET systems in the region and in their approximation to European standards. Digital platforms, spreadsheets, or simple applications help students analyze real data, make informed decisions, and apply good practices in efficiency and recycling. Finally, digitization enhances students' employability by developing the basic	

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<tr><td></td><td></td><td>and cross-cutting digital skills demanded by local and regional companies, especially in the productive, industrial, and service sectors. In this way, digital tools act as a bridge between training and the real needs of the labor market in Albania and Kosovo.</td><td></td></tr>
<tr><td>1.4</td><td>Paragraph</td><td>Brief overview of applicable emerging technologies (AI, AR/VR, educational apps).</td><td></td></tr>
<tr><td></td><td>Note</td><td>Emerging technologies offer new opportunities to improve VET training and efficient resource management. Artificial intelligence (AI) enables the analysis of consumption data, the optimization of processes, and decision-making support in training and production environments. Augmented and virtual reality (AR/VR) facilitates practical learning through workshop and process simulations, reducing material use and waste.
Educational applications, meanwhile, enable activity tracking, resource control, and autonomous learning, even in contexts with limited resources. These technologies contribute to modernizing VET systems in Albania and Kosovo and bringing them closer to the current needs of the labor market.</td><td></td></tr>
<tr><td></td><td>Table</td><td>
<table>
<tr><th>Technology</th><th>Applications in resource management</th><th>Benefits on VET</th><th>Use examples in Albania and Kosovo</th></tr>
<tr><td>Artificial Intelligence (AI)</td><td>Consumption analysis, inventory optimization, demand forecasting</td><td>Improves decision-making and efficiency</td><td>Control of material usage in technical workshops</td></tr>
<tr><td>Augmented Reality (AR)</td><td>Process and resource visualization</td><td>Reduces errors and unnecessary use of materials</td><td>Visual guides for equipment maintenance and management</td></tr>
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<tr><td>Virtual Reality (VR)</td><td>Simulation of production processes</td><td>Hands-on learning without actual resource consumption</td><td>Simulation of industrial or logistics environments</td></tr>
<tr><td>Educational Apps</td><td>Tracking resources, tasks, and results</td><td>Promotes independent learning and organization.</td><td>Digital registration of materials and waste</td></tr>
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<td>Chart</td>
<td>Digital technologies
⬇ Better resource management (less waste, greater efficiency)
⬇ Sustainability and green transition
⬇ Skills aligned with the job market</td>
<td>Use a line chart</td>
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Flashcards	Flashcards	**Flashcard 1** **Question:** How does digitization contribute to resource management in VET? **Answer:** It improves material control, reduces waste, and optimizes resource use. **Flashcard 2** **Question:** How can Artificial Intelligence (AI) be applied in VET? **Answer:** By analyzing consumption, optimizing inventories, and supporting decision-making. **Flashcard 3** **Question:** What is the main advantage of Augmented Reality (AR)? **Answer:** It allows processes and practical guides to be visualized without consuming real resources. **Flashcard 4** **Question:** What is Virtual Reality (VR) used for in vocational training? Answer: To simulate production environments and processes in a safe and sustainable way. **Flashcard 5** **Question:** What role do educational apps play in resource management? **Answer:** To record materials, track tasks, and encourage independent learning. **Flashcard 6** **Question:** Why are these technologies relevant in Albania and Kosovo? **Answer:** Because they support the modernization of VET and alignment with European standards. **Flashcard 7** **Question:** How do these technologies contribute to employability? **Answer:** They develop digital skills that are in demand in the labor market.	

Module 2 – Classification and selection of environmental digital tools

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Module number & title	Content type	Classification and selection of environmental digital tools	Notes
2.1	Paragraph/Heading	**Management, organization and interactive learning** tools	
	Paragraph	Digital management and organization tools facilitate the planning, monitoring, and coordination of training activities and environmental projects in Vocational Education and Training (VET). **LMS platforms**, such as *Moodle* or *Google Classroom*, allow content, tasks, and assessments to be organized in a digital environment, reducing paper use and improving the efficient management of educational resources. On the other hand, project planning tools such as **Trello** or **Notion** support the organization of tasks, the assignment of responsibilities, and the monitoring of deadlines in projects related to sustainability and environmental management. These tools promote collaborative work, transparency, and the development of key digital skills for the employability of students in Albania and Kosovo. Tools such as Kahoot!, Quizlet, and Genially reinforce concepts about recycling, the circular economy, and waste separation through quizzes, games, and interactive presentations. Interactive videos and environmental simulators can also be included, allowing students to experience waste management processes and assess impacts without generating actual waste.	
2.2	Paragraph/Heading	**Sensor applications, IoT y environmental measurement**	
2.2	Paragraph	The use of sensors and IoT (Internet of Things) technologies allows environmental data to be measured, recorded, and analyzed in real time, facilitating sustainable resource and waste management in educational and productive environments. These tools help students understand the impact of activities on the environment and make data-driven decisions. Types of applications • Air quality apps: these allow pollutants and particles in the environment to be monitored, helping to implement corrective actions in workshops,	

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		laboratories, or urban areas. • Connected weather stations: these collect information on temperature, humidity, wind, and rain, allowing environmental activities and projects to be planned, optimizing the use of natural resources. • Noise, water, and energy sensors: measure noise pollution levels, water and energy consumption, and help identify opportunities for savings, efficiency, and reduction of environmental impacts. These applications facilitate data-driven decision-making on resources and waste, allow for the simulation and analysis of environmental scenarios without real risk, and promote the development of digital, technical, and environmental skills aligned with sustainability and the employability of students in Albania and Kosovo.	
2.3.	Paragraph/Heading	**Data analysis and visualization** tools	
2.3.	Paragraph	. Data analysis and visualization tools enable clear and accessible interpretation, representation, and communication of information on the state of the environment and waste management. In vocational education and training (VET), these tools help students make informed decisions, assess impacts, and plan sustainable actions. – Google Earth/Maps: facilitates spatial analysis of environmental projects, identification of areas of waste generation or pollution, and planning of collection routes and resource management. – Tableau and Datawrapper: allow complex environmental data (waste, water or energy consumption) to be transformed into interactive graphs, maps, and dashboards, making the impact of management actions more visual. – Advanced spreadsheets (Excel, Google Sheets): allow sustainability indicators to be calculated, trends in waste generation or resource consumption to be analyzed, and the efficiency of implemented measures	

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<tr><td></td><td></td><td>to be evaluated.
These tools facilitate the visualization of complex information, promoting understanding of environmental impacts, supporting resource planning and optimization, improving efficiency in workshops and projects, and developing digital, analytical, and environmental skills that are directly applicable to employability in productive sectors in Albania and Kosovo.</td><td></td></tr>
<tr><td></td><td>Table</td><td>
<table>
<tr><th>Tool/Technology</th><th>Function/Purpose</th><th>Environmental benefit / VET applicability</th></tr>
<tr><td>Air quality apps</td><td>Monitoring of pollutants and particles</td><td>Enables the identification of environmental risks and corrective measures in VET workshops or laboratories</td></tr>
<tr><td>Connected weather stations</td><td>Measurement of temperature, humidity, rainfall, wind</td><td>Assists in planning environmental activities and optimizing the use of natural resources</td></tr>
<tr><td>Noise/water/energy sensors</td><td>Recording of noise pollution levels, water and energy consumption</td><td>Identification of opportunities for efficiency and reduction of environmental impacts</td></tr>
<tr><td>Google Earth / Maps</td><td>Spatial analysis of environmental projects</td><td>Locates waste areas, plans management routes, and monitors environmental impact</td></tr>
<tr><td>Tableau / Datawrapper</td><td>Visualization of environmental data</td><td>Transforms complex data into interactive graphs and maps for impact analysis and communication</td></tr>
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		Advanced spreadsheets (Excel/Google Sheets)	Calculation of indicators, monitoring of consumption and waste	Evaluates efficiency, plans resources, and analyzes environmental impact		

5 Activities (examples)

Unit 2:			
Module number & title	**Activity type**	**Activity development**	**Notes**
Flashcards	Flashcards	**Flashcard 1** **Front:** Image **Back:** Text	
Flashcards	Flashcards	**Flashcard 2** **Front:** Image **Back:** Image	
Flashcards	Flashcards	**Flashcard 3** **Front:** Text **Back:** Image	
Multiple choice and	Multiple choice	**Question 1** [Write your question here] **Answer 1** [Write your answer here]	Specify here the right answer.

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multiple response		**Feedback:** [Write your feedback here] **Answer 2** [Write your answer here] **Feedback:** [Write your feedback here]	
Multiple choice and multiple response	Multiple answer	**Question 1** [Write your question here] **Answer 1** [Write your answer here] **Feedback:** [Write your feedback here] **Answer 2** [Write your answer here] **Feedback:** [Write your feedback here]	Specify here the right answers.
Matching and fill in the blank	Matching	First choice / First match Second choice / Second match Third choice / Third match	
Digital map	Digital map	Students will identify green spaces, litter spots, air and water quality, and biodiversity (plants, insects, birds) in their surroundings. Based on this, they will create a digital map, adding the following information: • Geographic location • Image or video • Environmental description • Measurable data (amount of litter, species, noise, etc.) To enrich the experience, it would be beneficial to add 360° photos, short explanatory videos, and narrative audio recordings.	
Design of a small waste-separation system within the institution		Design of a small waste-separation system within the institution	

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Digital simulation		Digital simulation of the life cycle of a container	
Digital awareness	Videos, infographics	Creation of digital awareness campaigns (videos, infographics)	
Hackathon	Hackathon	Mini hackathon…	
		Design a project such as: • A waste reduction plan for the center. • An energy audit. • A circular economy campaign.	
		Design a gamified experience about: • Carbon footprint. • Recycling. • Energy transition.	

6. Assessment criteria

Include the assessment criteria for this unit: 8.1. Use of digital tools *(sample for possible tools to be used)* 8.2. Understanding the sustainability framework 8.3. Ability to implement real improvements 8.4. Final Product: waste management plan for your VET institution 8.5. Self- and co-assessment

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9. Inclusion of the EU/transnational perspective

Integration with Erasmus+ and VET Projects
• Opportunity to create joint digital products with European partners.
• Exchange of environmental data from different countries.
• Use of the project for developing international soft skills: cooperation, communication, and sustainability.

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1. Overview of the Unit

1.1. Unit information

Unit title	**Understanding Green Practices in VET**
This unit is part of…	Part of Module # Green Practices & VET Implementation
Prerequisites (if any)	This teaching unit is designed to be inclusive and accessible to a broad range of VET learners. No formal prerequisites are required. However, the following recommended prior knowledge and skills will support effective learning and engagement: • Basic understanding of vocational study fields, such as manufacturing, services, construction, agriculture, or related technical areas. • Introductory awareness of environmental issues, sustainability, or workplace safety, typically covered in general education or earlier VET modules. • Basic literacy and communication skills, enabling learners to participate in discussions, group work, and simple written or digital tasks. • Elementary digital skills, such as using online learning platforms, accessing digital materials, or completing simple digital assignments (desirable but not mandatory). The unit is structured to introduce all key concepts progressively, ensuring that learners without prior exposure to environment.

1.2. Justification and objectives of the Teaching Unit

The teaching unit *"Understanding Green Practices in VET"* is designed to equip vocational education and training (VET) learners with foundational knowledge and practical competencies related to sustainable waste management, recycling practices, and green transition principles. In the context of increasing environmental challenges and the EU Green Deal objectives, VET systems in Kosovo and Albania must progressively align with European standards, policies, and best practices in environmental sustainability.
This unit responds directly to the need for a dual transition—green and digital—by integrating environmental awareness with applied vocational skills. It addresses existing gaps in VET curricula related to circular economy concepts, resource efficiency, and environmentally responsible workplace behavior. By comparing national practices in Kosovo and Albania with EU regulatory and policy frameworks,

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learners gain a regional and European perspective that enhances their employability and mobility.
The unit is particularly relevant for VET learners preparing for occupations in manufacturing, services, construction, logistics, agriculture, and other sectors where waste generation and resource use are significant. Through case studies, hands-on activities, and workplace-oriented learning, learners are encouraged to adopt sustainable practices applicable both in training environments and in real professional settings.
Objectives of the Teaching Unit
Upon successful completion of this unit, learners will be able to:

1. Understand key concepts related to waste management, recycling, circular economy, and green practices within the VET context.
2. Identify and compare waste and recycling practices in Kosovo, Albania, and selected EU member states, recognizing similarities, differences, and best practices.
3. Explain the relevance of EU environmental policies (e.g., EU Green Deal, Waste Framework Directive) and their implications for VET systems and vocational occupations.
4. Apply sustainable practices in simulated or real workplace environments, including waste separation, recycling processes, and resource-efficient behaviors.
5. Develop environmental responsibility and awareness, fostering pro-environmental attitudes aligned with sustainable development goals.
6. Support employability and skills development by linking green competencies with labor market needs and emerging green jobs.

This teaching unit contributes to strengthening the capacity of VET institutions to support sustainable development while preparing learners to actively participate in the green transition at local, national, and European levels.

Proposed Duration: 20–25 teaching hours (theory, practical activities, and applied learning)

1.3. Contextualization of the issue in the country (Albania or Kosovo)

In Kosovo, the issue of waste management and recycling represents a significant environmental, economic, and institutional challenge, closely linked to the country's ongoing transition toward sustainable development and European integration. Rapid urbanization, population growth in urban centers, and increased consumption patterns have led to a steady rise in municipal and industrial waste, while recycling rates remain relatively low compared to EU averages.

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Despite the existence of a legal framework aligned in principle with European Union environmental directives—particularly the Waste Framework Directive—implementation remains uneven. Waste separation at source is limited, landfill dependency is high, and informal waste collection continues to play a notable role in the system. Local municipalities often face constraints related to infrastructure, financing, technical capacity, and public awareness, which affects the effectiveness of waste and recycling policies.

Within this context, **Vocational Education and Training (VET)** institutions play a critical role in addressing skills gaps and supporting the green transition. However, environmental sustainability and green practices are not yet systematically embedded across VET curricula in Kosovo. Many vocational profiles lack structured learning outcomes related to waste reduction, recycling processes, circular economy principles, and environmentally responsible workplace behavior. This results in a mismatch between emerging labor market needs—particularly in green and circular economy-related occupations—and the skills currently developed through VET programs.

Furthermore, Kosovo's aspiration for closer alignment with EU standards and policies, including those related to environmental protection and climate action, increases the urgency of integrating green competencies into education and training systems. The EU Green Deal, alongside regional and international commitments, requires a workforce that is not only technically competent but also environmentally aware and capable of applying sustainable practices in everyday professional activities.

The *"Understanding Green Practices in VET"* teaching unit directly responds to these challenges by contextualizing EU-level environmental policies within Kosovo's national framework and local realities. It supports learners in understanding how waste and recycling practices affect their communities and workplaces, while promoting behavioral change and practical solutions. By strengthening green skills in VET, this unit contributes to improving environmental performance, enhancing employability, and supporting Kosovo's long-term sustainable and European-oriented development goals.

1.3. Expected results in terms of teaching practices

The implementation of the teaching unit *"Understanding Green Practices in VET"* is expected to produce tangible and sustainable results in **teaching practices**, particularly through the professional development and pedagogical transformation of VET teachers and trainers involved in the WARP project.

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Firstly, teachers will strengthen their **capacity to integrate green and sustainability-related content** into vocational subjects. Through targeted training, educators will be able to contextualize waste management, recycling, and circular economy principles within specific vocational profiles, moving beyond theoretical instruction toward applied, occupation-oriented learning.
Secondly, the unit will contribute to the **adoption of learner-centered and practice-based teaching methodologies**. Teachers are expected to increasingly apply interactive approaches such as problem-based learning, case studies, simulations, project work, and workplace-based learning. These methods will enhance learner engagement and support the development of practical green skills relevant to real working environments.
Thirdly, the unit will support teachers in **aligning teaching practices with EU policy frameworks and standards**. Educators will gain improved understanding of EU environmental legislation, the European Green Deal, and related strategies, enabling them to translate policy objectives into clear learning outcomes, assessment criteria, and classroom activities adapted to local contexts in Kosovo and Albania.
In addition, the teaching unit will promote the **use of interdisciplinary and cross-curricular approaches**. Teachers will be encouraged to collaborate across different vocational fields, integrating environmental sustainability with technical, digital, and entrepreneurial competencies. This will foster coherence within VET curricula and support the dual green and digital transition.
Finally, the unit is expected to enhance teachers' **reflective and innovative teaching practices**. By participating in training, peer learning, and project-based activities, educators will be better equipped to evaluate and continuously improve their pedagogical approaches. This will lead to increased confidence in delivering green education content and contribute to the long-term modernization and sustainability of VET teaching practices.
Overall, the expected results include a more skilled, motivated, and environmentally aware teaching workforce capable of embedding green practices systematically within vocational education and training systems, in line with national priorities and EU expectations.

1.4. Connection with the objectives of the WARP Project

The teaching unit *"Understanding Green Practices in VET"* is directly aligned with and contributes to the core objectives of the **WARP Project – Waste and Recycling Practices for Dual Transition in Vocational Education**. The unit serves as a practical and pedagogical instrument for translating the project's strategic goals into concrete learning outcomes and teaching practices within VET systems in Kosovo, Albania, and the broader EU framework.
Firstly, the unit supports the WARP Project's objective of **strengthening green skills and competencies in vocational education**. By introducing learners to waste management, recycling processes, and circular economy principles, the unit ensures that sustainability is embedded within vocational training rather than treated as a standalone or optional topic. This directly advances the project's aim to

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prepare learners for environmentally responsible participation in the labor market.
Secondly, the unit contributes to the **dual transition (green and digital)** emphasized by the WARP Project. Through the use of innovative, learner-centered teaching methods and digital learning tools, the unit promotes modern pedagogical approaches that integrate environmental awareness with digital competence, supporting VET modernization and innovation.
Thirdly, the unit reinforces the WARP Project's goal of **aligning VET curricula with EU policies and standards**. By contextualizing EU environmental legislation and strategies—such as the EU Green Deal and waste-related directives—within national contexts, the unit enhances policy coherence and supports convergence between Western Balkan VET systems and EU frameworks.
In addition, the unit advances the project's objective of **capacity building for VET teachers and institutions**. It provides a structured framework for teacher training, curriculum development, and methodological improvement, fostering long-term institutional change and sustainability beyond the project's lifetime.
Finally, the unit contributes to **increased employability and labor market relevance**, another key objective of the WARP Project. By equipping learners with practical green competencies applicable across multiple sectors, the unit supports the development of a workforce capable of responding to emerging green jobs and sustainable industry practices.
In summary, *"Understanding Green Practices in VET"* operationalizes the WARP Project's objectives by bridging policy, pedagogy, and practice, ensuring that waste and recycling education becomes an integral and sustainable component of vocational education and training systems.

2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	This teaching unit develops a set of **ecological competencies** that enable VET learners to understand, apply, and promote environmentally responsible practices in vocational and workplace contexts. These competencies combine **knowledge, skills, and attitudes** aligned with sustainable development principles and EU environmental frameworks. The ecological competencies developed through this unit include: 1. **Environmental Awareness and Responsibility** Learners develop an understanding of the environmental impacts of

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	waste generation, improper disposal, and resource overuse. They build awareness of their individual and professional responsibility in reducing environmental footprints and contributing to sustainable practices at the workplace and community level. 2. **Waste Management and Recycling Competence** Learners acquire practical knowledge and skills related to waste prevention, separation, recycling, and safe disposal. This includes understanding different waste streams (e.g., municipal, industrial, hazardous), recycling processes, and the role of waste management systems in protecting the environment and public health. 3. **Understanding of Circular Economy Principles** The unit fosters competence in applying circular economy concepts such as reuse, repair, recycling, and resource efficiency. Learners understand how materials and products can remain in use for longer, reducing waste and supporting sustainable production and consumption patterns. 4. **Application of Green Practices in Vocational Settings** Learners are able to identify and apply environmentally friendly practices relevant to their specific vocational fields. This includes efficient use of materials and energy, minimizing waste during work processes, and complying with environmental standards and regulations in professional environments. 5. **Compliance with Environmental Regulations and Standards** Learners gain basic competence in understanding national and EU environmental legislation related to waste and recycling. They are able to recognize the importance of compliance with environmental rules and apply them appropriately within their vocational activities. 7. **Pro-environmental Attitudes and Behavioral Change** Beyond technical knowledge, the unit supports the development of positive environmental attitudes, ethical responsibility, and motivation to act sustainably.

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	Learners are encouraged to adopt environmentally responsible behaviors and to act as promoters of green practices in their workplaces and communities. Together, these ecological competencies enable learners to contribute actively to sustainable development, support the green transition, and meet the evolving environmental expectations of employers and society.
Description of the Learning Outcomes related to this competence	Upon successful completion of the teaching unit *"Understanding Green Practices in VET"*, learners will be able to demonstrate the following **learning outcomes** related to ecological competencies: 1. **Explain key environmental concepts** related to waste management, recycling, sustainability, and the circular economy, using appropriate vocational and environmental terminology. 2. **Identify different types of waste** generated in vocational and workplace settings and describe appropriate methods for waste reduction, separation, recycling, and safe disposal. 3. **Apply green practices in vocational activities**, including efficient use of materials and resources, reduction of waste during work processes, and adoption of environmentally responsible behaviors relevant to their occupational field. 4. **Demonstrate understanding of national and EU environmental regulations** related to waste and recycling, and recognize their implications for vocational practice and workplace compliance. 5. **Analyze the environmental impact of workplace practices** and propose practical solutions to improve sustainability and resource efficiency. 6. **Demonstrate pro-environmental attitudes**, showing responsibility, ethical awareness, and commitment to sustainable practices in training and work-based learning environments. 7. **Participate actively in sustainability-focused activities**, such as group projects, case studies, or simulations, contributing ideas and solutions related to waste management and recycling. These learning outcomes ensure that learners not only acquire theoretical knowledge

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	but also develop practical skills and responsible attitudes necessary to support the green transition within vocational education and the labor market.
Description of the evaluation criteria	The acquisition of learning outcomes related to **ecological competencies** will be verified through a combination of **formative and summative assessment methods**, ensuring that learners demonstrate knowledge, practical skills, and pro-environmental attitudes in line with vocational education standards. 1. **Knowledge-Based Assessment** Learners' understanding of key concepts—such as waste management, recycling, circular economy principles, and relevant national and EU regulations—will be verified through: • Short written or online quizzes • Oral questioning and class discussions • Concept-mapping or brief reflective assignments These tools assess learners' ability to explain and correctly use environmental and vocational terminology. 2. **Practical and Skills-Based Assessment** The application of green practices in vocational contexts will be verified through: • Practical exercises and simulations (e.g. waste separation, identification of recyclable materials, application of resource-efficient practices) • Observation during workshops, laboratories, or work-based learning environments • Task-based assessments aligned with specific vocational profiles Teachers will use observation checklists or rubrics to assess correct application of sustainable practices. 3. **Project and Case Study Assessment** Learners will complete individual or group projects focused on analyzing

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	waste and recycling practices in a workplace or training environment. Assessment criteria will include: • Identification of environmental issues • Feasibility and relevance of proposed solutions • Ability to link practice with regulatory and sustainability principles **4. Reflective and Attitudinal Assessment** Pro-environmental attitudes and behavioral change will be verified through: • Learning journals or reflective reports • Self-assessment and peer-assessment activities • Participation and engagement in sustainability-related discussions and activities These methods allow teachers to assess learners' awareness, responsibility, and commitment to green practices. **5. Alignment with Learning Outcomes and Standards** All assessment tools will be clearly aligned with the defined learning outcomes and adapted to national VET assessment frameworks in Kosovo and Albania, while reflecting EU competence-based education principles. Through this multi-method approach, the verification process ensures a reliable and comprehensive evaluation of learners' ecological competencies, confirming both their theoretical understanding and their ability to apply sustainable practices in real or simulated vocational contexts.

2.2. Digital competencies

Description of the competence	Within the teaching unit *"Understanding Green Practices in VET"*, **digital competencies** are developed to support the dual (green and digital) transition promoted by the WARP

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	Project. These competencies enable learners to effectively use digital tools and technologies to access information, support sustainable practices, and communicate and collaborate in vocational and learning environments. The digital competencies included in this unit are: 1. **Digital Information and Data Literacy** Learners develop the ability to search for, access, evaluate, and use digital information related to waste management, recycling, environmental regulations, and green practices. This includes interpreting digital data, reports, infographics, and online resources relevant to vocational and environmental contexts. 2. **Use of Digital Tools for Learning and Work** Learners acquire practical skills in using digital platforms, learning management systems, and basic software tools (e.g. word processing, presentations, spreadsheets) to complete assignments, document green practices, and support vocational tasks. 3. **Digital Support for Sustainable Practices** The unit promotes the use of digital tools to enhance sustainability, such as digital monitoring of resource use, online reporting of waste practices, and the use of apps or digital systems that support recycling, energy efficiency, or environmental awareness in the workplace. 4. **Digital Communication and Collaboration** Learners develop competence in communicating and collaborating digitally through emails, online discussions, shared documents, and group platforms. These skills are applied in group projects, case studies, and problem-solving activities related to green practices. 5. **Responsible and Ethical Use of Digital Technologies**

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	The unit fosters awareness of responsible digital behavior, including data protection, ethical use of information, and environmentally conscious use of digital technologies (e.g. reducing unnecessary printing, efficient use of devices). 6. **Adaptability to Digital Innovation in VET** Learners are encouraged to develop openness and adaptability to emerging digital tools and technologies that support green innovation and sustainable work practices, preparing them for evolving labor market requirements. Together, these digital competencies strengthen learners' ability to integrate technology into sustainable vocational practices, supporting innovation, efficiency, and responsible participation in modern, environmentally oriented workplaces.
Description of the Learning Outcomes related to this competence	Upon successful completion of the teaching unit *"Understanding Green Practices in VET"*, learners will be able to demonstrate the following **learning outcomes** related to digital competencies: 1. **Search for, access, and evaluate digital information** related to waste management, recycling, environmental sustainability, and relevant national and EU regulations. 2. **Use basic digital tools and platforms** (e.g. learning management systems, word processing, presentation and spreadsheet software) to complete learning tasks and document green practices in vocational contexts. 3. **Apply digital tools to support sustainable practices**, such as digitally recording waste data, monitoring resource use, or preparing simple reports on environmental performance. 4. **Communicate effectively using digital technologies**, sharing information, ideas, and project results related to green practices through emails, online discussions, or collaborative digital documents. 5. **Collaborate digitally in group activities**, contributing responsibly to shared

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	tasks, projects, and problem-solving activities focused on waste and recycling practices. 6. **Demonstrate responsible and ethical digital behavior**, including respect for data protection, proper use of digital information sources, and environmentally conscious use of digital devices. 7. **Adapt to new digital tools and learning environments**, showing readiness to engage with innovative technologies that support green and sustainable vocational practices. These learning outcomes ensure that learners can effectively use digital technologies to enhance learning, support sustainability objectives, and meet the demands of digitally enabled and environmentally responsible workplaces.
Description of the evaluation criteria	The acquisition of **digital competencies** in the teaching unit *"Understanding Green Practices in VET"* will be verified through a combination of **formative and summative assessment methods**, focusing on learners' ability to access, use, and apply digital tools in support of green practices and vocational tasks. **1. Knowledge and Understanding** • **Criteria:** Ability to identify, evaluate, and use digital information sources related to sustainability, waste management, and recycling. • **Verification Methods:** o Online or written quizzes on digital research skills and information evaluation. o Short assignments requiring learners to collect and summarize digital resources on green practices. **2. Practical Use of Digital Tools** • **Criteria:** Effective use of basic digital applications and platforms (e.g., word processing, spreadsheets, presentation software, learning management systems) for vocational and sustainability tasks. • **Verification Methods:** o Completion of assignments or reports using digital tools.

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	○ Demonstration of using spreadsheets or digital forms to record or analyze waste/recycling data. ○ Submission of digital presentations summarizing project or case study results. **3. Digital Communication and Collaboration** • **Criteria:** Ability to communicate and collaborate through digital means in individual or group tasks. • **Verification Methods:** ○ Observation of participation in online discussions, forums, or collaborative documents. ○ Evaluation of group projects or peer-reviewed assignments completed via digital platforms. **4. Application of Digital Tools for Sustainability** • **Criteria:** Use of digital solutions to support environmentally friendly practices, such as digital monitoring, reporting, or awareness campaigns. • **Verification Methods:** ○ Project-based tasks where learners apply digital tools to track, document, or present green practices. ○ Assessment of practical exercises demonstrating efficiency improvements or data-driven sustainability decisions. **5. Responsible and Ethical Use of Digital Technologies** • **Criteria:** Demonstration of ethical, safe, and environmentally conscious use of digital tools. • **Verification Methods:** ○ Observation of proper citation and responsible use of online resources. ○ Reflection tasks or self-assessment on ethical and environmentally conscious digital behaviors. **6. Adaptability and Innovation** • **Criteria:** Ability to adopt new digital tools or platforms to enhance learning,

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	problem-solving, or sustainable practices. • **Verification Methods:** ○ Evaluation of learner engagement with new digital applications introduced during the unit. ○ Assessment of innovative solutions or suggestions for digital tools supporting green practices. **Assessment Approach:** A **rubric-based evaluation** will be applied, combining **formative assessments** (quizzes, observation, peer/self-assessment) and **summative assessments** (projects, digital assignments, presentations). This ensures a comprehensive measurement of both the **technical skills** and **applied digital behaviors** required to meet the learning outcomes.

2.3. Pedagogical competencies

Description of the competence	Within the teaching unit *"Understanding Green Practices in VET"*, **pedagogical competencies** focus on learners' ability to engage in effective learning processes, participate in collaborative learning, and reflect critically on knowledge and practice. These competencies emphasize **learning-to-learn skills**, communication, and the ability to transfer knowledge to practical and professional contexts. The pedagogical competencies included in this unit are: **1. Learning-to-Learn Competence** • Learners develop the ability to manage their own learning processes, set learning goals, monitor progress, and reflect on outcomes. • This includes self-directed learning related to environmental practices, sustainable resource management, and green vocational skills. **2. Critical Thinking and Problem-Solving** • Learners acquire the ability to analyze environmental challenges in vocational

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	contexts, evaluate information, and propose practical, evidence-based solutions. • This competence supports decision-making in sustainability-related tasks and workplace problem solving. **3. Collaboration and Teamwork** • Learners develop skills for effective participation in group projects, peer learning, and cooperative problem-solving activities. • Emphasis is placed on communication, negotiation, and consensus-building within diverse teams. **4. Reflective Practice** • Learners are encouraged to reflect on their own learning, vocational practices, and the environmental impact of their actions. • Reflection promotes continuous improvement and supports the development of professional and ethical awareness. **5. Transfer of Knowledge to Practice** • Learners develop the ability to apply knowledge and skills acquired during the unit to real-life vocational settings. • This includes integrating green practices into workplace routines, community projects, or entrepreneurial activities. **6. Motivation and Self-Efficacy in Learning** • The unit fosters learners' confidence, motivation, and engagement with learning activities. • Learners develop the mindset to take initiative, persist in learning tasks, and embrace sustainable practices as part of professional development. These pedagogical competencies ensure that learners are not only **technically skilled** but also capable of **independent learning, critical reflection, collaboration, and practical application**—all essential for adapting to modern, environmentally conscious vocational work environments.
Description of the Learning Outcomes related	Upon successful completion of the teaching unit *"Understanding Green Practices in VET"*,

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to this competence	learners will be able to demonstrate the following **learning outcomes** related to pedagogical competencies: 1. **Manage their own learning process** by setting goals, planning tasks, monitoring progress, and reflecting on achievements in relation to green practices and sustainability. 2. **Analyze and solve problems** related to waste management, recycling, and environmentally responsible practices, using critical thinking and evidence-based reasoning. 3. **Work effectively in teams**, demonstrating collaboration, communication, and negotiation skills during group projects, case studies, or practical activities focused on sustainable vocational practices. 4. **Reflect on personal and professional practice**, evaluating the environmental impact of their actions and identifying opportunities for improvement in learning and workplace contexts. 5. **Apply knowledge and skills in real-life contexts**, transferring lessons learned from the classroom to workplace environments, vocational tasks, or community-based sustainability projects. 6. **Demonstrate motivation, initiative, and self-efficacy**, engaging actively in learning activities, participating in discussions, and showing responsibility for sustainable outcomes in vocational settings. 7. **Evaluate and adapt learning strategies**, showing the ability to adjust approaches to tasks, projects, and challenges related to green practices and vocational competencies. These learning outcomes ensure that learners not only **acquire knowledge and technical skills**, but also develop the ability to **learn independently, think critically, collaborate effectively, reflect on actions, and apply learning in real-world situations**—all essential for lifelong learning and professional development in sustainable vocational education.
Description of the evaluation criteria	The acquisition of **pedagogical competencies** in the teaching unit *"Understanding*

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	Green Practices in VET" will be verified using a combination of **formative and summative assessment methods**, focusing on learners' ability to manage learning, reflect critically, collaborate, and apply knowledge in practical contexts. **1. Self-Directed Learning and Learning-to-Learn Skills** • **Criteria:** Ability to set learning goals, plan tasks, monitor progress, and reflect on achievements. • **Verification Methods:** o Learning journals or reflective logs documenting personal progress and strategies. o Self-assessment checklists evaluating completion of tasks and goal achievement. o Short presentations where learners outline their learning process and lessons learned. **2. Critical Thinking and Problem-Solving** • **Criteria:** Ability to analyze environmental challenges, evaluate solutions, and make evidence-based decisions. • **Verification Methods:** o Case studies or problem-based tasks where learners propose solutions to waste and recycling challenges. o Scenario-based exercises simulating real workplace problems requiring sustainable solutions. o Rubric-based evaluation of analytical reasoning and solution feasibility. **3. Collaboration and Teamwork** • **Criteria:** Effective participation in group activities, communication, and negotiation. • **Verification Methods:** o Observation of learners' roles and contributions in group projects or collaborative exercises. o Peer-assessment evaluating communication, cooperation, and shared

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responsibility.
    - Assessment of group project outcomes, including joint reports or presentations.

4. Reflective Practice

- **Criteria:** Ability to reflect on personal actions, vocational tasks, and environmental impact.
- **Verification Methods:**
    - Reflective essays or reports analyzing individual contributions and lessons learned.
    - Guided reflection questions after practical exercises or site visits.
    - Assessment of the depth and relevance of reflections using a standardized rubric.

5. Application of Knowledge to Practice

- **Criteria:** Ability to transfer learned concepts to real-life vocational or community contexts.
- **Verification Methods:**
    - Practical projects or workplace-based tasks implementing green practices.
    - Assessment of project reports demonstrating correct application of knowledge.
    - Observation of learners performing sustainable actions in simulated or real vocational tasks.

6. Motivation, Initiative, and Self-Efficacy

- **Criteria:** Active engagement, persistence in tasks, and proactive behavior in learning and sustainable practices.
- **Verification Methods:**
    - Teacher observation of participation in class and group activities.
    - Self-assessment questionnaires measuring confidence and initiative.
    - Recognition of learners proposing innovative or voluntary sustainability

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	actions. **Assessment Approach:** A **rubric-based evaluation framework** combining **formative assessments** (observations, peer/self-assessment, reflective tasks) and **summative assessments** (projects, presentations, reports) will be applied. This ensures that learners' pedagogical competencies are measured comprehensively, covering their **knowledge, practical skills, collaboration, reflection, and personal development**.

3. Learning outcomes

By the end of this course, students should be able to:

	Knowledge	**Skills**	**Competences**
LO1	By the end of the teaching unit *"Understanding Green Practices in VET"*, learners should be able to: 1. **Understand fundamental environmental concepts** o Define and explain key terms such as waste management, recycling, circular economy, resource efficiency, and sustainable practices. 2. **Recognize the importance of environmental sustainability** o Explain why sustainable practices are essential for workplaces, communities, and society.	By the end of the teaching unit *"Understanding Green Practices in VET"*, learners will acquire the following **skills**: 1. **Practical Environmental Skills** o Apply waste separation, recycling, and resource-efficient practices in vocational and workplace contexts. o Implement circular economy principles, such as reuse, repair, and material optimization. 2. **Digital Skills**	Upon completing the unit, learners will develop the following **competences**: 1. **Ecological Competence** o Demonstrate environmentally responsible behavior and pro-environmental attitudes. o Integrate green practices into vocational tasks, promoting sustainable decision-making. 2. **Digital Competence** o Utilize technology responsibly and effectively to support learning, communication, and

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	○ Understand the relationship between vocational activities and environmental impact. 3. **Identify waste types and management methods** ○ Differentiate between municipal, industrial, hazardous, and recyclable waste. ○ Describe appropriate methods for reducing, separating, recycling, and safely disposing of waste. 4. **Understand relevant regulations and frameworks** ○ Identify national environmental laws in Kosovo/Albania and relevant EU directives, including the Waste Framework Directive and EU Green Deal principles. ○ Explain how regulations impact vocational practices and workplace compliance.	○ Use digital tools to document, monitor, and report environmental practices. ○ Communicate and collaborate effectively via digital platforms for sustainability-related tasks. 3. **Problem-Solving and Analytical Skills** ○ Identify environmental challenges in workplaces or VET settings. ○ Analyze information, evaluate alternatives, and propose practical, evidence-based solutions. 4. **Project and Teamwork Skills** ○ Participate effectively in group projects, case studies, and workshops. ○ Plan, execute, and present sustainability projects collaboratively. 5. **Reflective and Self-Management Skills** ○ Monitor personal learning and professional	sustainability initiatives. 3. **Pedagogical Competence** ○ Manage personal learning and reflect critically on vocational practices. ○ Collaborate, communicate, and solve problems in group and workplace contexts. 4. **Transversal/Key Competence** ○ Apply knowledge, skills, and attitudes in new and complex vocational or community situations. ○ Demonstrate adaptability, initiative, and continuous learning in alignment with sustainability goals. These **skills and competences** together ensure that learners can **not only understand sustainability concepts but also actively implement them**, use digital tools, collaborate effectively, and continuously improve their practices in vocational environments.

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	5. **Understand the role of technology in supporting green practices** ○ Describe how digital tools and platforms can be used to monitor, report, and improve environmental practices in vocational settings. 6. **Recognize the importance of personal and professional responsibility** ○ Understand the ethical and social dimensions of adopting environmentally responsible behavior in the workplace and learning environments. This knowledge-focused learning outcome ensures that learners acquire a **solid theoretical foundation** before moving on to practical applications, problem-solving, and behavioral competencies.	performance related to environmental responsibility. ○ Evaluate and adjust personal and group practices to improve outcomes.	
LO2	Learners should be able to: 1. Explain advanced concepts in **waste management, recycling, and circular economy**.	Learners should be able to: 1. **Implement practical sustainability measures** in vocational	Learners should develop the following competences: 1. **Ecological Competence** – Inte-

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	2. Understand the **environmental impact of vocational activities** and the importance of sustainability for workplaces and society. 3. Identify and describe **national and EU environmental regulations**, policies, and directives relevant to waste and sustainability. 4. Recognize the role of **digital tools** in supporting sustainable practices, monitoring, and reporting environmental performance. Understand the principles of **green behavior, ethical responsibility, and professional conduct** in environmental management.	activities (waste reduction, separation, recycling, resource efficiency). 2. **Use digital tools effectively** to document, monitor, and communicate environmental practices. 3. **Analyze and solve environmental problems**, evaluating alternatives and proposing practical, evidence-based solutions. 4. **Plan and participate in group projects or workplace initiatives**, demonstrating teamwork, collaboration, and communication skills. 5. **Reflect on personal and professional practices**, adapting strategies to improve sustainability outcomes and learning progress.	grate environmentally responsible practices into vocational tasks, showing awareness of sustainability and circular economy principles. 2. **Digital Competence** – Use technology ethically and efficiently to support sustainable practices and vocational learning. 3. **Pedagogical/Transversal Competence** – Manage learning, collaborate effectively, think critically, and apply knowledge in practical contexts. 4. **Personal and Professional Competence** – Demonstrate initiative, responsibility, and adaptability in implementing sustainable practices in workplace and community settings. This LO2 ensures that learners **not only understand environmental concepts but can also actively apply them**, use technology to support sustainable practices, collaborate effectively, and take personal responsibility for green behaviors in vocational environments.

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LO3	Learners should be able to: 1. Understand the **ethical and social dimensions** of environmental sustainability and green practices in vocational contexts. 2. Explain the **long-term impact of personal and professional decisions** on the environment and communities. 3. Recognize the importance of **sustainability as a core value** in modern vocational practice and lifelong learning. Understand the role of **individual and collective responsibility** in supporting green initiatives, both in the workplace and society.	Learners should be able to: 1. **Demonstrate pro-environmental behaviors** consistently in learning and vocational environments (e.g., waste reduction, responsible resource use). 2. **Engage in reflective practice**, assessing the environmental and social impact of their own actions. 3. **Advocate and promote sustainability** in group activities, projects, and workplace initiatives. 4. **Integrate ethical considerations** into decision-making when implementing vocational tasks. 5. **Encourage collaboration and shared responsibility** for sustainability among peers and colleagues.	Learners should develop the following competences: 1. **Ecological and Sustainability Competence** – Demonstrate ethical awareness and personal commitment to environmentally responsible behavior in vocational and everyday contexts. 2. **Digital Responsibility Competence** – Use digital tools and platforms in ways that are environmentally conscious and ethically sound. 3. **Pedagogical and Social Competence** – Actively participate in collaborative and reflective learning processes, promoting sustainability and ethical practices. 4. **Personal and Civic Competence** – Exhibit initiative, responsibility, and commitment to sustainable development as a core personal and professional value. **Summary:** LO3 ensures that learners **internalize**

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			sustainable values and ethical attitudes, complementing the knowledge (LO1) and practical skills (LO2) developed earlier. Together, LO1–LO3 create a **holistic learning outcome framework**, integrating **knowledge, skills, and competences** across ecological, digital, and pedagogical dimensions.

4. Teaching contents of the Unit *(the following are proposals for the content of the unit)*

Module 1: Understanding Green Practices in VET.			
Module number & title	**Content type**	**Content development**	**Notes**
1.1 **Module Introduction to Green Practices and Sustainable Development in VET**.	Paragraph/Heading	**Green Practices and Sustainability Concepts**. This module introduces the fundamental concepts of green practices, sustainability, and sustainable development, emphasizing their relevance to vocational education and training (VET). **Sustainable Development Goals (SDGs) and Education.** The module explains the United Nations Sustainable Development Goals, with particular focus on goals related to education, climate action, responsible consumption, and decent work. Learners gain an understanding of how VET institutions contribute to sustainability by preparing a skilled workforce capable of supporting green economies and environmentally responsible practices	
1.2 Module	Paragraph/Heading	**Global and Regional Environmental Challenges.** This module explores key environmental challenges such as climate change, pollution, waste generation,	

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Environmental Challenges and the Role of VET Systems		and resource depletion at global and regional levels. **VET as a Driver for Environmental Change.** The role of VET systems in addressing environmental challenges through skills development and workforce transformation is examined. Learners analyze how vocational skills and qualifications can directly support green industries, environmental protection, and sustainable economic development.	
1.3 Module **Policy and Regulatory Frameworks for Green VET**	Paragraph/Heading	**EU Green Deal and Environmental Policies** This module introduces EU environmental and climate policies, including the European Green Deal and circular economy strategies. **National Environmental and VET Policies** The alignment of national policies in Kosovo and Albania with EU frameworks is discussed. Learners understand how policy frameworks shape green practices in VET institutions and influence curriculum design and occupational standards.	
1.4. Module: **Circular Economy Principles in Vocational Education**	Paragraph/Heading	**Concept and Principles of the Circular Economy** This module explains the principles of the circular economy, including reuse, recycling, recovery, and resource efficiency. **Circular Economy in VET Curricula** Examples of integrating circular economy concepts into vocational training programs are presented. Learners explore how vocational skills contribute to waste reduction and sustainable production processes in different economic sectors.	
1.5. Module: **Waste Management and Recycling**	Paragraph/Heading	**Waste Streams and Management Systems** This module introduces types of waste generated in VET institutions, including industrial, electronic, and hazardous waste. **Recycling and Waste Reduction Practices**	

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Practices in VET Institutions		Practical approaches to waste separation, recycling, and reduction within educational institutions are discussed. Learners examine real-life examples of effective waste management practices and their environmental and economic benefits.	
1.6. Module: **Energy Efficiency and Renewable Energy in VET**	Paragraph/Heading	**Energy Consumption in Education and Industry** This module analyzes patterns of energy use in VET institutions and vocational workplaces. **Renewable Energy Technologies** The basics of renewable energy sources such as solar, wind, and biomass are introduced. Learners understand how energy-efficient technologies and renewable energy systems can be integrated into vocational training and daily institutional operations.	
1.7. Module: **Green Skills and Competences for the Labor Market**	Paragraph/Heading	**Definition and Types of Green Skills** This module defines green skills and distinguishes between technical, transversal, and digital green competences. **Labor Market Needs and Green Jobs** The demand for green skills in emerging and transforming sectors is explored. Learners identify key competences required for green jobs and understand how VET qualifications support employability in sustainable industries.	
1.8. Module: **Sustainable Resource Management and Eco-Innovation**	Paragraph/Heading	**Efficient Use of Natural Resources** This module addresses sustainable management of water, raw materials, and energy resources. **Eco-Innovation and Green Technologies** Innovative technologies and processes that reduce environmental impact are presented.	

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		Learners explore how eco-innovation drives competitiveness and sustainability in vocational occupations and enterprises.	
1.9. Module: **Green Practices in VET Institutions and Work-Based Learning**	Paragraph/Heading	**Institutional Green Management Practices** This module examines how VET institutions implement green strategies in governance, infrastructure, and daily operations. **Work-Based Learning and Industry Cooperation** The integration of green practices into apprenticeships and workplace learning is discussed. Learners understand the importance of collaboration between VET providers and enterprises in promoting sustainable practices.	
1.10. Module: **Monitoring, Evaluation, and Continuous Improvement of Green Practices**		**Measuring Environmental Performance** This module introduces indicators and tools for monitoring environmental performance in VET institutions. **Continuous Improvement and Quality Assurance** Approaches for evaluating and improving green practices over time are explored. Learners develop awareness of continuous improvement processes and the role of evaluation in achieving long-term sustainability in VET systems.	
	Note	Columns layout (for textbook / digital learning platform)	
	ColumnsText column 1	**Concept of Green VET** Green VET integrates environmental sustainability into vocational education, helping learners acquire skills needed for green jobs and sustainable industries.	Image: **green-vet-training.jpg** (example: students working with solar panels or

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<table>
<tr><td></td><td></td><td></td><td>recycling work-shop)</td></tr>
<tr><td></td><td>Text column 2</td><td>Example from Albania VET schools integrate sustainable tourism and eco-friendly hospitality training, encouraging energy saving and waste reduction practices in hotels and tourism services.</td><td></td></tr>
<tr><td></td><td>Text column 3</td><td>Example from Kosovo Technical schools introduce training in solar panel installation, energy-efficient construction, and environmental management practices in workshops.</td><td></td></tr>
<tr><td></td><td>Table</td><td>
<table>
<tr><td>Column 1 – Solar Energy Training</td><td>Column 2 – Energy-Efficient Construction</td><td>Column 3 – Environmental Management</td></tr>
<tr><td>Row 1: Students learn the basics of photovoltaic systems and how solar panels generate electricity.</td><td>Row 1: Students study materials and building techniques that reduce energy consumption in buildings.</td><td>Row 1: Students study materials and building techniques that reduce energy consumption in buildings.</td></tr>
<tr><td>Row 2: Practical workshops include installation, maintenance, and safety procedures for solar systems.</td><td>Row 2: Training includes insulation methods, efficient lighting systems, and sustainable construction standards.</td><td>Row 2: Learners practice sorting waste, resource efficiency, and environmental monitoring in school workshops aligned with practices promoted across the Kosovo VET sector.</td></tr>
</table>
</td><td></td></tr>
<tr><td></td><td>Divider</td><td>By default, dividers are labeled as CONTINUE, but you can customize this label</td><td></td></tr>
</table>

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		as needed.	
2.	Statement	Green practices in Vocational Education and Training (VET) support the transition toward sustainable economies by equipping learners with environmental awareness, resource-efficient skills, and knowledge aligned with European sustainability goals. In Albania and Kosovo, integrating green competencies into VET contributes to workforce readiness, environmental protection, and alignment with standards promoted by the European Union.	
3.	List	• Renewable energy training (solar installation & maintenance) 40% • Energy-efficient construction & sustainable materials 35% • Waste management, recycling & environmental protection 25%	Use a bulleted list
4.	Chart	**Item 1 = 25%:** Item 1. Foundations of Sustainable Development and Green Economy (basic concepts, environmental challenges, relevance for VET learners) **Item 2 = 15%:** European Green Policies and Standards relevant to VET (e.g., frameworks promoted by the European Union and alignment with national education reforms in Albania and Kosovo) **Item 3 = 10%:** Environmental Awareness and Green Mindset in Vocational Education (responsible consumption, workplace sustainability culture) **Item 4 = 30%:** Practical Green Skills in VET Programs (renewable energy basics, energy-efficient construction, sustainable materials, and eco-friendly workshop practices) **Item 5 = 20%:** Community Impact and Green Jobs in Albania and Kosovo (labor market opportunities, local sustainability initiatives, and future skills demand)	Use a line chart
5. Image **Renewable**	Image	Renewable energy training in Vocational Education and Training (VET) equips learners with practical skills in solar panel installation, system maintenance,	https://solar-

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energy training in Vocational Education and Training (VET)		and basic energy management. This training supports the transition toward cleaner energy sources while preparing students for emerging green jobs in Albania and Kosovo. By learning how photovoltaic systems work, how to install them safely, and how to maintain efficiency over time, trainees gain competencies that are increasingly demanded in modern labor markets. The approach also aligns with sustainability priorities promoted by the European Union, encouraging environmentally responsible practices and supporting regional efforts to reduce carbon emissions and increase renewable energy adoption.	training.org/staff-training-options/ 
Energy-efficient construction & sustainable materials	Image	Energy-efficient construction and the use of sustainable materials are key components of green skills development in Vocational Education and Training (VET). Through practical learning, students understand insulation techniques, energy-saving building design, and the selection of environmentally friendly materials that reduce environmental impact. These competencies help future technicians and construction workers contribute to greener infrastructure in Albania and Kosovo. Training also highlights cost efficiency, improved building performance, and reduced carbon emissions across the construction sector. Such knowledge aligns with sustainability standards encouraged by the European Union, supporting the transition toward more resilient, climate-conscious buildings and modern construction practices.	
Waste management, recycling & environmental protection	Image	Waste management, recycling, and environmental protection are essential components of green practices in Vocational Education and Training (VET). In workshops and training centers, students learn how to properly sort waste, reuse materials, reduce resource consumption, and handle potentially harmful substances safely. These practices encourage responsible behavior in technical professions such as construction, manufacturing, and services. By integrating environmental protection into daily training activities, VET institutions help learners understand the impact of their work on ecosystems and communities. This approach strengthens practical skills while promoting sustainable habits	

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		that can be applied in workplaces and local industries across Albania and Kosovo.	
6. Video & audio	Video	**Renewable energy training in Vocational Education and Training (VET) – Video:** https://www.youtube.com/watch?v=hBsGnXpOE9A	https://www.youtube.com/watch?v=hBsGnXpOE9A
6. Video & audio	Video	Energy-efficient construction & sustainable materials video: https://www.youtube.com/watch?v=AQJFVJJLgf4	https://www.youtube.com/watch?v=AQJFVJJLgf4
6. Video & audio	Audio	Waste management, recycling & environmental protection video:. https://www.youtube.com/watch?v=8krzjlHaGes	Waste Management
7. Files	File	https://www.youtube.com/watch?v=kZIrIQDf1nQ	https://www.youtube.com/watch?v=kZIrIQDf1nQ
8. Accordion and tabs	Accordion	Accordion 1: Foundations of Green Practices in VET	
	Accordion	Practical Application of Sustainable Skills in VET	
8. Accordion and tabs	Tab	Tab 1: Header: Foundations of Green Practices in VET Description: This section introduces the basic concepts of green practices and sustainable development within Vocational Education and Training (VET). Learners explore how environmental responsibility, resource efficiency, and climate awareness are becoming essential elements of modern vocational skills. The content explains why green competencies are important for industries such as construction, energy, agriculture, and manufacturing. It also highlights how integrating	

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		sustainability into training programs helps prepare students for future labor market demands. The module connects local developments in Albania and Kosovo with broader sustainability strategies supported by the European Union, encouraging VET institutions to adopt environmentally responsible training approaches.	
	Tab	TAB 2 Header 1: Practical Application of Sustainable Skills in VET Description: This section focuses on how green practices are applied in real vocational learning environments. Students are introduced to practical activities such as energy-saving techniques, responsible use of materials, recycling practices, and environmentally friendly workshop management. The aim is to help learners translate sustainability concepts into daily professional tasks. Examples from VET schools and training centers in Albania and Kosovo demonstrate how institutions can integrate green technologies and practices into curricula. By combining theory with hands-on experience, this part of the module strengthens learners' readiness for green jobs and supports the transition toward more sustainable economic development.	
9. Labeled graphic	Labeled graphic	**Marker 1 – Image** **Title:** Renewable Energy in Practice **Description:** This marker includes an image of an air balloon symbolizing innovation, clean energy exploration, and new perspectives in sustainable education. In the context of VET, it can represent the introduction of renewable energy technologies and modern training approaches that prepare learners for green careers and environmentally responsible practices.	
		Marker 2 – Infographic	

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		Title: Water and Ecosystem Awareness **Description:** This marker presents an infographic about lakes, highlighting the importance of water resources, environmental protection, and ecosystem balance. It can be used to explain how sustainable practices in vocational sectors—such as construction, tourism, and agriculture—help protect natural resources and promote responsible environmental management.	
		Marker 3 – Audio **Title:** Additional Learning Resource **Description:** This marker allows the addition of an audio clip where instructors or experts can provide further explanations about green practices, sustainability principles, or real examples from VET institutions in Albania and Kosovo. Audio content helps learners better understand concepts through guided commentary or short educational briefings.	
		Marker 4 – Text **Title:** Nature and Sustainable Landscapes **Description:** This marker contains text describing a mountain environment, symbolizing natural heritage and environmental responsibility. It can be used to discuss how vocational education supports sustainable development by promoting eco-friendly construction, tourism practices, and protection of natural landscapes.	
10.Scenario	Scenario	**Slide 1: Scenario Introduction** **Character & Background** • Character: A middle-aged businesswoman • Setting: Office environment • Role: She represents a customer navigating sustainability challenges in vocational education and training (VET). **Instructions for Learners** • You are placed in a virtual "escape room" scenario.	

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		• To progress, you must **navigate customer situations** by applying **empathy skills**. • Each correct response unlocks the next level, bringing you closer to "escaping" the room. • Focus on listening, understanding perspectives, and responding with empathy in the context of **green practices and sustainable development in VET** (Albania and Kosovo).	
		Slide 2: Scenario **Scenario Text** A training center struggles with high energy costs. The customer asks how sustainable practices can reduce expenses without disrupting daily operations. **Instruction Text** Listen carefully, show empathy, and suggest green solutions. Correct answers unlock the next step toward escaping the room.	
		Slide 3: Closing **Closing Text** You've completed the escape room journey. By applying empathy and green practices, you've shown how VET can drive sustainable development in Albania and Kosovo. **Instruction Text** Reflect on the scenarios, share your insights, and consider how empathy and sustainability can guide real-world vocational training challenges.	
11.Timeline	Timeline	Date 1: 2026 **Date 1: 2026** Vocational training centers in Albania and Kosovo begin integrating basic green practices—energy efficiency, waste reduction, and awareness campaigns.	
		Date 2: 2024 **Date 2: 2027** Sustainability becomes embedded in curricula. Training centers adopt renewable energy solutions, promote recycling, and strengthen empathy-driven approaches to customer engagement.	

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12.Flashcards	Flashcards	**Flashcard 1** **Front: Image** *Visual suggestion*: A vocational training classroom with solar panels or energy-efficient lighting. **Back: Text** *Text*: "Green practices in VET reduce costs, save energy, and build sustainable skills for future generations."	
		Flashcard 2 **Front: Image** *Visual suggestion*: Recycling bins in a training center labeled for paper, plastic, and electronics. **Back: Image** *Visual suggestion*: Infographic showing the recycling cycle (collection → processing → reuse).	
		Flashcard 3 **Front: Text** *Text*: "Empathy and sustainability go hand in hand in vocational training." **Back: Image** *Visual suggestion*: A businesswoman listening attentively to a student, with green icons (leaf, energy bulb, recycle symbol) in the background.	
13. Multiple choice and multiple response	Multiple choice	**Question 1** Which green practice can help vocational training centers in Albania and Kosovo reduce costs while supporting sustainability? **Answer 1** Introduce energy-efficient lighting and equipment. **Feedback**: Correct! Energy efficiency lowers expenses and supports long-term sustainability. **Answer 2** Ignore energy use and focus only on customer service. **Feedback**: Not quite. While customer service is important, neglecting energy practices increases costs and harms sustainability goals.	Specify here the right answer.
13. Multiple choice and multiple response	Multiple answer	**Question 1** Which of the following actions support sustainable development in vocational training centers in Albania and Kosovo? **Answer 1** Implement recycling programs for paper and plastics.	Specify here the right answers.

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		• **Feedback**: Correct! Recycling reduces waste and promotes environmental responsibility. **Answer 2** Increase reliance on single-use materials for convenience. • **Feedback**: Not correct. Single-use materials increase waste and harm sustainability goals.	
14. Matching and fill in the blank	Matching	First choice / First match Second choice / Second match Third choice / Third match Matching Exercise **First choice / First match** • **Choice:** Recycling programs • **Match:** Reduce waste and promote responsibility **Second choice / Second match** • **Choice:** Energy-efficient lighting • **Match:** Lower electricity costs **Third choice / Third match** • **Choice:** Sustainable procurement • **Match:** Encourage eco-friendly supply chains	
14. Matching and fill in the blank	Fill in the blank	**Matching Exercise** **Question:** Match each green practice with its benefit in VET centers. • **Practices:** 1. Recycling programs 2. Energy-efficient lighting 3. Sustainable procurement • **Benefits:** A. Reduces waste and promotes responsibility B. Lowers electricity costs C. Encourages eco-friendly supply chains **Correct Matches:** 1 → A 2 → B 3 → C **Fill-in-the-Blank Exercise** **Question:** Vocational training centers in Albania and Kosovo can reduce costs	Specify here the missing word or words.

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		by adopting _____ solutions such as solar panels and efficient equipment. **Answer:** Renewable energy **Feedback:** Correct! Renewable energy solutions lower expenses and support sustainable development.	

5 Activities (examples)

Module 1: Understanding Green Practices in VET			
Module number & title	**Activity type**	**Activity development**	**Notes**
Flashcards 1. **What Are Green Practices?**	Flashcards	**Flashcard 1** **Activity: What Are Green Practices?** **Front:** An illustration showing a VET workshop with solar panels on the roof, recycling bins, and students working with eco-friendly tools. **Back:** Green practices are environmentally responsible actions that reduce negative impacts on nature. In VET, they include energy efficiency, waste reduction, sustainable resource use, and environmentally friendly technologies.	
Flashcards 2. **Circular Economy in Practice**	Flashcards	**Flashcard 2** **Activity: Circular Economy in Practice** **Front:** A circular diagram showing stages: *Reduce → Reuse → Repair → Recycle*. **Back:** The circular economy aims to keep materials and products in use for as long as possible. In VET, it supports skills such as repair, recycling, and sustainable production instead of "use and throw" models.	

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Flashcards 3. **Waste Management in VET Institutions**	Flashcards	**Flashcard 3** **Activity: Waste Management in VET Institutions** **Front:** Color-coded waste bins (paper, plastic, metal, organic waste) placed inside a vocational school or training center. **Back:** Proper waste management includes waste separation, recycling, and safe disposal. VET institutions can reduce environmental impact by teaching learners how to manage waste responsibly in workshops and workplaces.	
Flashcards 4		**Flashcard 4** **Activity: Green Skills for the Labor Market** **Front:** A worker wearing safety equipment installing solar panels or maintaining energy-efficient machinery. **Back:** Green skills combine technical knowledge, environmental awareness, and problem-solving abilities. These skills are essential for green jobs and increase employability in sustainable industries.	
Multiple choice and multiple response	Multiple choice	**Question 1** Which green practice can help vocational training centers in Albania and Kosovo reduce costs while supporting sustainability? **Answer 1** Introduce energy-efficient lighting and equipment. **Feedback**: Correct! Energy efficiency lowers expenses and supports long-term sustainability. **Answer 2** Ignore energy use and focus only on customer service. **Feedback**: Not quite. While customer service is important, neglecting energy	Specify here the right answer.

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		practices increases costs and harms sustainability goals.	
Multiple choice and multiple response	Multiple answer	**Question 1** Which of the following actions support sustainable development in vocational training centers in Albania and Kosovo? **Answer 1** Implement recycling programs for paper and plastics. • **Feedback**: Correct! Recycling reduces waste and promotes environmental responsibility. **Answer 2** Increase reliance on single-use materials for convenience. **Feedback**: Not correct. Single-use materials increase waste and harm sustainability goals.	Specify here the right answers.
Matching and fill in the blank	Matching	First choice / First match Second choice / Second match Third choice / Third match Matching Exercise **First choice / First match** • **Choice:** Recycling programs • **Match:** Reduce waste and promote responsibility **Second choice / Second match** • **Choice:** Energy-efficient lighting • **Match:** Lower electricity costs **Third choice / Third match** • **Choice:** Sustainable procurement • **Match:** Encourage eco-friendly supply chains	
Matching and fill in the blank	Fill in the blank	**Matching Exercise** **Question:** Match each green practice with its benefit in VET centers. • **Practices:** 1. Recycling programs 2. Energy-efficient lighting 3. Sustainable procurement	Specify here the missing word or words.

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		• **Benefits:** A. Reduces waste and promotes responsibility B. Lowers electricity costs C. Encourages eco-friendly supply chains **Correct Matches:** 1 → A 2 → B 3 → C **Fill-in-the-Blank Exercise** **Question:** Vocational training centers in Albania and Kosovo can reduce costs by adopting _____ solutions such as solar panels and efficient equipment. **Answer:** Renewable energy **Feedback:** Correct! Renewable energy solutions lower expenses and support sustainable development.	
Digital map	Digital map	**Digital Map Activity** **Task:** Learners will explore a digital map showing local recycling points in Albania and Kosovo. **Instructions:** • Identify the nearest recycling point to your training center. • Discuss how accessibility to recycling facilities supports sustainable practices in VET. • Reflect on how empathy skills can be applied when guiding customers or peers toward using these facilities. **Learning Outcome:** Students connect **green practices** with real-world local infrastructure, reinforcing sustainability awareness and practical application.	
Design of a small waste-separation system within the institution		**Activity: Designing a Waste-Separation System** **Task:** Learners design a small waste-separation system within their institution to promote sustainable practices. **Instructions:** • Identify 3–4 categories of waste (e.g., paper, plastics, organic, electronic). • Assign clearly labeled bins for each category. • Place bins in accessible areas such as classrooms, workshops, and offices. • Create simple awareness posters to guide proper use.	

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		Learning Outcome: Students understand how waste separation reduces environmental impact, encourages responsibility, and supports sustainable development in VET centers.	
Digital simulation		Activity: Digital Simulation – Container Life Cycle **Task:** Learners explore a digital simulation showing the journey of a container from production to disposal or recycling. **Simulation Stages:** 1. **Production** – Raw materials are extracted and processed. 2. **Usage** – The container is used in vocational training or daily institutional activities. 3. **Disposal** – The container is discarded after use. 4. **Recycling/Reuse** – The container is collected, processed, and reintroduced into the cycle. **Instructions:** • Follow the container through each stage in the simulation. • Identify environmental impacts at each stage. • Suggest improvements (e.g., sustainable materials, better recycling practices). **Learning Outcome:** Students gain awareness of the **full life cycle of materials**, connecting sustainability concepts to practical actions in VET institutions.	
Digital awareness	Videos, infographics	**Activity: Digital Awareness Campaigns** **Task:** Learners design short digital campaigns (videos, infographics, or social media posts) to raise awareness about green practices in vocational training centers. **Instructions:** • Choose a sustainability topic (e.g., recycling, energy efficiency, water conservation). • Create a 1–2 minute video or an infographic highlighting the importance	

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		of the practice. • Use clear visuals, simple language, and empathy-driven messaging to connect with the audience. • Share the campaign digitally within the institution or community. **Learning Outcome:** Students learn how to **communicate sustainability effectively**, combining creativity, empathy, and digital skills to promote green practices in VET.	
Hackathon	Hackathon	**Activity: Mini Hackathon – Green Practices in VET** **Task:** Learners participate in a short hackathon to design innovative solutions that promote sustainability in vocational training centers in Albania and Kosovo. **Instructions:** • Form small teams (3–5 participants). • Identify a sustainability challenge (e.g., energy use, waste management, recycling, water conservation). • Brainstorm and prototype a practical solution (digital tool, awareness campaign, or physical system). • Present ideas in a 5-minute pitch to peers and instructors. **Learning Outcome:** Students practice collaboration, creativity, and problem-solving while applying **green practices** and **empathy skills** to real-world VET challenges.	

6. Methodology

5.1. Project-Based Learning (PBL) and collaborative Learning	• Project-Based Learning (PBL) is used as a core methodology to engage learners in solving real or simulated environmental challenges related

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	to green practices in VET. Learners work in teams to design, analyze, and propose sustainable solutions, such as waste reduction plans or energy-efficiency improvements for VET institutions or enterprises. • Collaborative learning supports PBL by encouraging teamwork, peer learning, and shared responsibility. Through group tasks and joint decision-making, learners develop communication, problem-solving, and critical-thinking skills while applying sustainability concepts in practice.
5.2. Collaborative learning between institutions in Albania and Kosovo	• This methodology promotes cross-institutional collaboration between VET providers in Albania and Kosovo. Learners and teachers participate in joint activities, such as virtual group projects, shared case analyses, and comparative discussions on national green practices. • By exchanging experiences and perspectives, learners gain regional and European awareness of sustainability challenges and solutions. This approach strengthens intercultural competences, regional cooperation, and alignment with EU education and environmental standards.
5.3. Blended Learning	• Blended learning combines face-to-face teaching with online learning activities. Classroom instruction is complemented by digital resources, self-paced learning materials, and online discussions. • This methodology allows flexibility in learning, supports different learning styles, and enhances learner autonomy. It also enables the integration of digital tools for sustainability education, aligning with the dual green and digital transition objectives.
5.4. Online and mobile Learning tools	• Online and mobile learning tools are used to support interactive and accessible learning. These include learning management systems (LMS), mobile applications, digital flashcards, online quizzes, and collaborative platforms. • Such tools facilitate continuous learning beyond the classroom, enable quick knowledge checks, and support communication between learners and teachers. They also enhance digital competences while reinforcing

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	environmental content.
5.5. Real case studies	• Real case studies from VET institutions, enterprises, and green industries are used to connect theory with practice. Learners analyze actual examples of waste management systems, energy-efficient technologies, or circular economy practices. • This methodology encourages critical thinking and problem-solving by exposing learners to real-life challenges and decision-making processes. It also helps learners understand the practical relevance of green practices in vocational occupations.
5.6. Visits to companies in the sector	• Educational visits to companies and organizations operating in green sectors are integrated into the unit. These visits allow learners to observe green practices, technologies, and management systems in real working environments. • Company visits strengthen links between VET and the labor market, provide insights into green jobs, and motivate learners by showcasing practical applications of sustainability concepts.
5.7. Workshops and experiential learning	• Workshops and experiential learning activities enable learners to actively engage in hands-on tasks, simulations, and practical exercises. Examples include waste sorting exercises, energy audits, or small-scale eco-innovation projects. • Through experiential learning, learners acquire practical skills and deepen their understanding by learning through doing. This methodology enhances retention of knowledge and supports the development of professional competences.
5.8. Community based and participatory approaches	• Community-based and participatory approaches involve learners in local sustainability initiatives, community projects, and awareness-raising activities. Learners collaborate with local stakeholders, municipalities, NGOs, or enterprises. • This methodology fosters social responsibility, civic engagement, and a

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	sense of ownership over environmental issues. It also reinforces the role of VET institutions as active contributors to sustainable community development.

7. Resources

The following resources support teaching, learning, and assessment activities in the unit. They combine policy documents, educational materials, digital tools, and real-world resources relevant to green practices in VET.

7.1. Policy and Strategic Documents

- European Green Deal policy documents and action plans
- EU Circular Economy Action Plan
- United Nations Sustainable Development Goals (SDGs)
- National environmental and VET strategies of Kosovo and Albania
- EU Skills Agenda and Green Skills policy frameworks

These resources provide the policy context and strategic direction for integrating sustainability into vocational education and training.

7.2. Teaching and Learning Materials

- VET curricula and training standards related to environmental protection and sustainability
- Manuals and handbooks on green practices, waste management, and energy efficiency
- Case study collections on sustainable enterprises and green technologies
- Teacher guides for sustainability and environmental education

These materials support lesson planning, classroom instruction, and learner engagement.

7.3. Digital and Online Learning Resources

- Learning Management Systems (LMS) for course delivery and collaboration
- Online platforms for digital flashcards, quizzes, and interactive learning
- Educational videos and multimedia content on green technologies and practices
- Open Educational Resources (OER) related to sustainability and VET

Digital resources enhance blended and online learning and support learner autonomy.

7.4. Tools for Practical and Project-Based Learning

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- Waste separation and recycling equipment (bins, labels, measuring tools)
- Energy monitoring tools and basic audit checklists
- Templates for project work, action plans, and sustainability assessments
- Simulation tools and virtual labs related to green technologies

These tools enable hands-on learning and real-world application of green practices.

7.5. Industry and Community Resources

- Partner companies and enterprises in green sectors
- Local municipalities and environmental agencies
- NGOs and community organizations working on sustainability
- Chambers of commerce and professional associations

Collaboration with external stakeholders strengthens work-based learning and community engagement.

7.6. Assessment and Evaluation Resources

- Rubrics for project-based and collaborative learning
- Self-assessment and peer-assessment tools
- Reflection journals and learning portfolios
- Monitoring indicators for green practices in VET institutions

These resources support fair, transparent, and competence-based assessment.

7.7. Infrastructure and Facilities

- VET workshops and laboratories adapted for green practices
- Renewable energy installations (where available)
- Recycling points and eco-corners within institutions
- IT infrastructure for blended and online learning

Appropriate infrastructure enhances experiential learning and institutional sustainability.

8. Assessment criteria

Include the assessment criteria for this unit:

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8.1. Use of digital tools *(sample for possible tools to be used)*
Assessment focus:
Learners' ability to effectively use digital and mobile tools to support learning, collaboration, research, and presentation of green practices.
Sample tools:

- Learning Management Systems (LMS) for content access and task submission
- Online collaboration tools for group work and joint projects
- Digital flashcards and quiz tools for knowledge checks
- Presentation and visualization tools for project reporting

Assessment criteria:

- Appropriate selection and correct use of digital tools
- Active participation in online and blended learning activities
- Quality and clarity of digital content produced
- Respect for digital ethics and responsible use of technology

8.2. Understanding the sustainability framework
Assessment focus:
Learners' understanding of sustainability concepts, environmental policies, and green practices relevant to VET.
Assessment criteria:

- Correct explanation of key sustainability concepts and principles
- Understanding of circular economy, waste management, and energy efficiency
- Awareness of EU and national sustainability frameworks
- Ability to relate sustainability principles to vocational sectors

8.3. Ability to implement real improvements
Assessment focus:
Learners' capacity to identify environmental challenges and propose realistic, measurable improvements within a VET institution or workplace.
Assessment criteria:

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- Identification of relevant environmental issues
- Feasibility and practicality of proposed solutions
- Consideration of environmental, economic, and social impacts
- Teamwork and problem-solving skills during implementation

8.4. Final Product: waste management plan for your VET institution

Assessment focus:

Development of a comprehensive waste management plan as a final project.

Assessment criteria:

- Clear structure and objectives of the waste management plan
- Accurate analysis of waste types and current practices
- Proposed waste reduction, separation, and recycling measures
- Alignment with sustainability principles and regulatory requirements
- Quality of written documentation and oral presentation

The final product demonstrates the learner's ability to integrate knowledge, skills, and competences acquired throughout the unit.

8.5. Self- and co-assessment

Assessment focus:

Learners' reflection on their own learning process and contribution to group work, as well as peer evaluation.

Assessment criteria:

- Honest and constructive self-reflection on learning outcomes
- Ability to assess peers' contributions respectfully and objectively
- Identification of strengths, challenges, and areas for improvement
- Active engagement in feedback and continuous improvement processes

Assessment Methods Used

- Continuous assessment (participation, tasks, digital activities)
- Project-based assessment (final waste management plan)
- Self- and peer-assessment tools

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- Teacher observation and feedback

9. Inclusion of the EU/transnational perspective

The unit **"Understanding Green Practices in VET"** integrates a strong European and transnational dimension by comparing sustainability practices in **Albania, Kosovo, and EU Member States**, and by supporting the gradual adaptation of **European environmental and VET standards** to the local context of the Western Balkans.

9.1. Comparative Perspective: Albania, Kosovo, and the EU

Across the EU, green practices in VET are embedded within comprehensive policy frameworks such as the **European Green Deal**, the **Circular Economy Action Plan**, and the **EU Skills Agenda**. These frameworks ensure systematic integration of sustainability into curricula, institutional management, and work-based learning.

In **Albania and Kosovo**, green practices in VET are increasingly recognized as a strategic priority, but their implementation remains uneven. While policy alignment with EU standards is progressing, practical application at institutional level often faces challenges related to infrastructure, funding, teacher training, and industry cooperation.

This unit encourages learners to critically compare:

- The level of institutionalization of green practices
- Availability of green technologies and infrastructure
- Integration of sustainability into VET curricula
- Links between VET institutions and green labor markets

9.2. Adaptation of European Standards to the Local Context

European standards and guidelines serve as a reference point rather than a one-size-fits-all model. The unit emphasizes **context-sensitive adaptation**, taking into account the economic, institutional, and social realities of Albania and Kosovo.

Learners explore how EU standards on:

- Waste management
- Energy efficiency
- Environmental management systems
- Occupational and environmental safety

can be **progressively adapted** to local VET institutions through realistic, scalable, and cost-effective measures.

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9.3. Transnational Learning and Knowledge Exchange

The unit promotes transnational learning through collaboration between VET institutions in Albania, Kosovo, and EU partner countries. Joint projects, virtual exchanges, and comparative case studies enable learners and teachers to share experiences and best practices.
This transnational approach:

- Enhances understanding of European diversity in sustainability practices
- Strengthens regional cooperation and mutual learning
- Encourages transfer of innovation and good practices

9.4. Contribution to European Integration and Policy Alignment

By integrating EU-level concepts, terminology, and practices, the unit supports the broader process of **European integration** of Albania and Kosovo. Learners become familiar with European approaches to sustainability, quality assurance, and skills development.
The unit contributes to:

- Harmonization of VET practices with EU priorities
- Development of green competences aligned with European labor market needs
- Preparation of learners for mobility, employability, and lifelong learning

9.5. Added Value for Learners and Institutions

The inclusion of the EU and transnational perspective adds clear value by:

- Broadening learners' understanding beyond national contexts
- Enhancing employability in regional and European labor markets
- Strengthening institutional capacity for innovation and reform
- Supporting evidence-based policy development in green VET

Concluding Note

Through comparison, adaptation, and cooperation, the unit positions **green practices in VET** as a shared European objective while respecting local realities. This balanced approach ensures relevance, feasibility, and sustainability of reforms in Albania and Kosovo.

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1. Overview of the Unit

1.1. Unit information

Unit title	**Understanding Green Practices in VET**
This unit is part of…	Part of Module # Green Practices & VET Implementation
Prerequisites (if any)	This teaching unit is designed to be inclusive and accessible to a broad range of VET learners. No formal prerequisites are required. However, the following recommended prior knowledge and skills will support effective learning and engagement: • Basic understanding of vocational study fields, such as manufacturing, services, construction, agriculture, or related technical areas. • Introductory awareness of environmental issues, sustainability, or workplace safety, typically covered in general education or earlier VET modules. • Basic literacy and communication skills, enabling learners to participate in discussions, group work, and simple written or digital tasks. • Elementary digital skills, such as using online learning platforms, accessing digital materials, or completing simple digital assignments (desirable but not mandatory). The unit is structured to introduce all key concepts progressively, ensuring that learners without prior exposure to environment.

1.2. Justification and objectives of the Teaching Unit

The teaching unit *"Understanding Green Practices in VET"* is designed to equip vocational education and training (VET) learners with foundational knowledge and practical competencies related to sustainable waste management, recycling practices, and green transition principles. In the context of increasing environmental challenges and the EU Green Deal objectives, VET systems in Kosovo and Albania must progressively align with European standards, policies, and best practices in environmental sustainability.
This unit responds directly to the need for a dual transition—green and digital—by integrating environmental awareness with applied vocational skills. It addresses existing gaps in VET curricula related to circular economy concepts, resource efficiency, and environmentally responsible workplace behavior. By comparing national practices in Kosovo and Albania with EU regulatory and policy frameworks,

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learners gain a regional and European perspective that enhances their employability and mobility.
The unit is particularly relevant for VET learners preparing for occupations in manufacturing, services, construction, logistics, agriculture, and other sectors where waste generation and resource use are significant. Through case studies, hands-on activities, and workplace-oriented learning, learners are encouraged to adopt sustainable practices applicable both in training environments and in real professional settings.
Objectives of the Teaching Unit
Upon successful completion of this unit, learners will be able to:

8. Understand key concepts related to waste management, recycling, circular economy, and green practices within the VET context.
9. Identify and compare waste and recycling practices in Kosovo, Albania, and selected EU member states, recognizing similarities, differences, and best practices.
10. Explain the relevance of EU environmental policies (e.g., EU Green Deal, Waste Framework Directive) and their implications for VET systems and vocational occupations.
11. Apply sustainable practices in simulated or real workplace environments, including waste separation, recycling processes, and resource-efficient behaviors.
12. Develop environmental responsibility and awareness, fostering pro-environmental attitudes aligned with sustainable development goals.
13. Support employability and skills development by linking green competencies with labor market needs and emerging green jobs.

This teaching unit contributes to strengthening the capacity of VET institutions to support sustainable development while preparing learners to actively participate in the green transition at local, national, and European levels.

Proposed Duration: 20–25 teaching hours (theory, practical activities, and applied learning)

1.3. Contextualization of the issue in the country (Albania or Kosovo)

In Kosovo, the issue of waste management and recycling represents a significant environmental, economic, and institutional challenge, closely linked to the country's ongoing transition toward sustainable development and European integration. Rapid urbanization, population growth in urban centers, and increased consumption patterns have led to a steady rise in municipal and industrial waste, while recycling rates remain relatively low compared to EU averages.

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Despite the existence of a legal framework aligned in principle with European Union environmental directives—particularly the Waste Framework Directive—implementation remains uneven. Waste separation at source is limited, landfill dependency is high, and informal waste collection continues to play a notable role in the system. Local municipalities often face constraints related to infrastructure, financing, technical capacity, and public awareness, which affects the effectiveness of waste and recycling policies.

Within this context, **Vocational Education and Training (VET)** institutions play a critical role in addressing skills gaps and supporting the green transition. However, environmental sustainability and green practices are not yet systematically embedded across VET curricula in Kosovo. Many vocational profiles lack structured learning outcomes related to waste reduction, recycling processes, circular economy principles, and environmentally responsible workplace behavior. This results in a mismatch between emerging labor market needs—particularly in green and circular economy-related occupations—and the skills currently developed through VET programs.

Furthermore, Kosovo's aspiration for closer alignment with EU standards and policies, including those related to environmental protection and climate action, increases the urgency of integrating green competencies into education and training systems. The EU Green Deal, alongside regional and international commitments, requires a workforce that is not only technically competent but also environmentally aware and capable of applying sustainable practices in everyday professional activities.

The *"Understanding Green Practices in VET"* teaching unit directly responds to these challenges by contextualizing EU-level environmental policies within Kosovo's national framework and local realities. It supports learners in understanding how waste and recycling practices affect their communities and workplaces, while promoting behavioral change and practical solutions. By strengthening green skills in VET, this unit contributes to improving environmental performance, enhancing employability, and supporting Kosovo's long-term sustainable and European-oriented development goals.

1.3. Expected results in terms of teaching practices

The implementation of the teaching unit *"Understanding Green Practices in VET"* is expected to produce tangible and sustainable results in **teaching practices**, particularly through the professional development and pedagogical transformation of VET teachers and trainers involved in the WARP project.

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Firstly, teachers will strengthen their **capacity to integrate green and sustainability-related content** into vocational subjects. Through targeted training, educators will be able to contextualize waste management, recycling, and circular economy principles within specific vocational profiles, moving beyond theoretical instruction toward applied, occupation-oriented learning.
Secondly, the unit will contribute to the **adoption of learner-centered and practice-based teaching methodologies**. Teachers are expected to increasingly apply interactive approaches such as problem-based learning, case studies, simulations, project work, and workplace-based learning. These methods will enhance learner engagement and support the development of practical green skills relevant to real working environments.
Thirdly, the unit will support teachers in **aligning teaching practices with EU policy frameworks and standards**. Educators will gain improved understanding of EU environmental legislation, the European Green Deal, and related strategies, enabling them to translate policy objectives into clear learning outcomes, assessment criteria, and classroom activities adapted to local contexts in Kosovo and Albania.
In addition, the teaching unit will promote the **use of interdisciplinary and cross-curricular approaches**. Teachers will be encouraged to collaborate across different vocational fields, integrating environmental sustainability with technical, digital, and entrepreneurial competencies. This will foster coherence within VET curricula and support the dual green and digital transition.
Finally, the unit is expected to enhance teachers' **reflective and innovative teaching practices**. By participating in training, peer learning, and project-based activities, educators will be better equipped to evaluate and continuously improve their pedagogical approaches. This will lead to increased confidence in delivering green education content and contribute to the long-term modernization and sustainability of VET teaching practices.
Overall, the expected results include a more skilled, motivated, and environmentally aware teaching workforce capable of embedding green practices systematically within vocational education and training systems, in line with national priorities and EU expectations.

1.4. Connection with the objectives of the WARP Project

The teaching unit *"Understanding Green Practices in VET"* is directly aligned with and contributes to the core objectives of the **WARP Project – Waste and Recycling Practices for Dual Transition in Vocational Education**. The unit serves as a practical and pedagogical instrument for translating the project's strategic goals into concrete learning outcomes and teaching practices within VET systems in Kosovo, Albania, and the broader EU framework.
Firstly, the unit supports the WARP Project's objective of **strengthening green skills and competencies in vocational education**. By introducing learners to waste management, recycling processes, and circular economy principles, the unit ensures that sustainability is embedded within vocational training rather than treated as a standalone or optional topic. This directly advances the project's aim to

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prepare learners for environmentally responsible participation in the labor market.
Secondly, the unit contributes to the **dual transition (green and digital)** emphasized by the WARP Project. Through the use of innovative, learner-centered teaching methods and digital learning tools, the unit promotes modern pedagogical approaches that integrate environmental awareness with digital competence, supporting VET modernization and innovation.
Thirdly, the unit reinforces the WARP Project's goal of **aligning VET curricula with EU policies and standards**. By contextualizing EU environmental legislation and strategies—such as the EU Green Deal and waste-related directives—within national contexts, the unit enhances policy coherence and supports convergence between Western Balkan VET systems and EU frameworks.
In addition, the unit advances the project's objective of **capacity building for VET teachers and institutions**. It provides a structured framework for teacher training, curriculum development, and methodological improvement, fostering long-term institutional change and sustainability beyond the project's lifetime.
Finally, the unit contributes to **increased employability and labor market relevance**, another key objective of the WARP Project. By equipping learners with practical green competencies applicable across multiple sectors, the unit supports the development of a workforce capable of responding to emerging green jobs and sustainable industry practices.
In summary, *"Understanding Green Practices in VET"* operationalizes the WARP Project's objectives by bridging policy, pedagogy, and practice, ensuring that waste and recycling education becomes an integral and sustainable component of vocational education and training systems.

2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	This teaching unit develops a set of **ecological competencies** that enable VET learners to understand, apply, and promote environmentally responsible practices in vocational and workplace contexts. These competencies combine **knowledge, skills, and attitudes** aligned with sustainable development principles and EU environmental frameworks. The ecological competencies developed through this unit include: 1. **Environmental Awareness and Responsibility** Learners develop an understanding of the environmental impacts of

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	waste generation, improper disposal, and resource overuse. They build awareness of their individual and professional responsibility in reducing environmental footprints and contributing to sustainable practices at the workplace and community level. 2. **Waste Management and Recycling Competence** Learners acquire practical knowledge and skills related to waste prevention, separation, recycling, and safe disposal. This includes understanding different waste streams (e.g., municipal, industrial, hazardous), recycling processes, and the role of waste management systems in protecting the environment and public health. 3. **Understanding of Circular Economy Principles** The unit fosters competence in applying circular economy concepts such as reuse, repair, recycling, and resource efficiency. Learners understand how materials and products can remain in use for longer, reducing waste and supporting sustainable production and consumption patterns. 4. **Application of Green Practices in Vocational Settings** Learners are able to identify and apply environmentally friendly practices relevant to their specific vocational fields. This includes efficient use of materials and energy, minimizing waste during work processes, and complying with environmental standards and regulations in professional environments. 5. **Compliance with Environmental Regulations and Standards** Learners gain basic competence in understanding national and EU environmental legislation related to waste and recycling. They are able to recognize the importance of compliance with environmental rules and apply them appropriately within their vocational activities. 6. **Pro-environmental Attitudes and Behavioral Change** Beyond technical knowledge, the unit supports the development of positive environmental attitudes, ethical responsibility, and motivation to act

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	sustainably. Learners are encouraged to adopt environmentally responsible behaviors and to act as promoters of green practices in their workplaces and communities. Together, these ecological competencies enable learners to contribute actively to sustainable development, support the green transition, and meet the evolving environmental expectations of employers and society.
Description of the Learning Outcomes related to this competence	Upon successful completion of the teaching unit *"Understanding Green Practices in VET"*, learners will be able to demonstrate the following **learning outcomes** related to ecological competencies: 8. **Explain key environmental concepts** related to waste management, recycling, sustainability, and the circular economy, using appropriate vocational and environmental terminology. 9. **Identify different types of waste** generated in vocational and workplace settings and describe appropriate methods for waste reduction, separation, recycling, and safe disposal. 10. **Apply green practices in vocational activities**, including efficient use of materials and resources, reduction of waste during work processes, and adoption of environmentally responsible behaviors relevant to their occupational field. 11. **Demonstrate understanding of national and EU environmental regulations** related to waste and recycling, and recognize their implications for vocational practice and workplace compliance. 12. **Analyze the environmental impact of workplace practices** and propose practical solutions to improve sustainability and resource efficiency. 13. **Demonstrate pro-environmental attitudes**, showing responsibility, ethical awareness, and commitment to sustainable practices in training and work-based learning environments. 14. **Participate actively in sustainability-focused activities**, such as group projects, case studies, or simulations, contributing ideas and solutions related to waste management and recycling.

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	These learning outcomes ensure that learners not only acquire theoretical knowledge but also develop practical skills and responsible attitudes necessary to support the green transition within vocational education and the labor market.
Description of the evaluation criteria	The acquisition of learning outcomes related to **ecological competencies** will be verified through a combination of **formative and summative assessment methods**, ensuring that learners demonstrate knowledge, practical skills, and pro-environmental attitudes in line with vocational education standards. **1. Knowledge-Based Assessment** Learners' understanding of key concepts—such as waste management, recycling, circular economy principles, and relevant national and EU regulations—will be verified through: • Short written or online quizzes • Oral questioning and class discussions • Concept-mapping or brief reflective assignments These tools assess learners' ability to explain and correctly use environmental and vocational terminology. **2. Practical and Skills-Based Assessment** The application of green practices in vocational contexts will be verified through: • Practical exercises and simulations (e.g. waste separation, identification of recyclable materials, application of resource-efficient practices) • Observation during workshops, laboratories, or work-based learning environments • Task-based assessments aligned with specific vocational profiles Teachers will use observation checklists or rubrics to assess correct application of sustainable practices. **3. Project and Case Study Assessment** Learners will complete individual or group projects focused on analyzing

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	waste and recycling practices in a workplace or training environment. Assessment criteria will include: • Identification of environmental issues • Feasibility and relevance of proposed solutions • Ability to link practice with regulatory and sustainability principles **4. Reflective and Attitudinal Assessment** Pro-environmental attitudes and behavioral change will be verified through: • Learning journals or reflective reports • Self-assessment and peer-assessment activities • Participation and engagement in sustainability-related discussions and activities These methods allow teachers to assess learners' awareness, responsibility, and commitment to green practices. **5. Alignment with Learning Outcomes and Standards** All assessment tools will be clearly aligned with the defined learning outcomes and adapted to national VET assessment frameworks in Kosovo and Albania, while reflecting EU competence-based education principles. Through this multi-method approach, the verification process ensures a reliable and comprehensive evaluation of learners' ecological competencies, confirming both their theoretical understanding and their ability to apply sustainable practices in real or simulated vocational contexts.

2.2. Digital competencies

Description of the competence	Within the teaching unit *"Understanding Green Practices in VET"*, **digital competencies** are developed to support the dual (green and digital) transition promoted by the WARP

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	Project. These competencies enable learners to effectively use digital tools and technologies to access information, support sustainable practices, and communicate and collaborate in vocational and learning environments. The digital competencies included in this unit are: **1. Digital Information and Data Literacy** Learners develop the ability to search for, access, evaluate, and use digital information related to waste management, recycling, environmental regulations, and green practices. This includes interpreting digital data, reports, infographics, and online resources relevant to vocational and environmental contexts. **2. Use of Digital Tools for Learning and Work** Learners acquire practical skills in using digital platforms, learning management systems, and basic software tools (e.g. word processing, presentations, spreadsheets) to complete assignments, document green practices, and support vocational tasks. **3. Digital Support for Sustainable Practices** The unit promotes the use of digital tools to enhance sustainability, such as digital monitoring of resource use, online reporting of waste practices, and the use of apps or digital systems that support recycling, energy efficiency, or environmental awareness in the workplace. **4. Digital Communication and Collaboration** Learners develop competence in communicating and collaborating digitally through emails, online discussions, shared documents, and group platforms. These skills are applied in group projects, case studies, and problem-solving activities related to green practices. **6. Responsible and Ethical Use of Digital Technologies** The unit fosters awareness of responsible digital behavior, including data

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	protection, ethical use of information, and environmentally conscious use of digital technologies (e.g. reducing unnecessary printing, efficient use of devices). 7. **Adaptability to Digital Innovation in VET** Learners are encouraged to develop openness and adaptability to emerging digital tools and technologies that support green innovation and sustainable work practices, preparing them for evolving labor market requirements. Together, these digital competencies strengthen learners' ability to integrate technology into sustainable vocational practices, supporting innovation, efficiency, and responsible participation in modern, environmentally oriented workplaces.
Description of the Learning Outcomes related to this competence	Upon successful completion of the teaching unit *"Understanding Green Practices in VET"*, learners will be able to demonstrate the following **learning outcomes** related to digital competencies: 8. **Search for, access, and evaluate digital information** related to waste management, recycling, environmental sustainability, and relevant national and EU regulations. 9. **Use basic digital tools and platforms** (e.g. learning management systems, word processing, presentation and spreadsheet software) to complete learning tasks and document green practices in vocational contexts. 10. **Apply digital tools to support sustainable practices**, such as digitally recording waste data, monitoring resource use, or preparing simple reports on environmental performance. 11. **Communicate effectively using digital technologies**, sharing information, ideas, and project results related to green practices through emails, online discussions, or collaborative digital documents. 12. **Collaborate digitally in group activities**, contributing responsibly to shared tasks, projects, and problem-solving activities focused on waste and recycling practices.

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	13. **Demonstrate responsible and ethical digital behavior**, including respect for data protection, proper use of digital information sources, and environmentally conscious use of digital devices. 14. **Adapt to new digital tools and learning environments**, showing readiness to engage with innovative technologies that support green and sustainable vocational practices. These learning outcomes ensure that learners can effectively use digital technologies to enhance learning, support sustainability objectives, and meet the demands of digitally enabled and environmentally responsible workplaces.
Description of the evaluation criteria	The acquisition of **digital competencies** in the teaching unit *"Understanding Green Practices in VET"* will be verified through a combination of **formative and summative assessment methods**, focusing on learners' ability to access, use, and apply digital tools in support of green practices and vocational tasks. **1. Knowledge and Understanding** • **Criteria:** Ability to identify, evaluate, and use digital information sources related to sustainability, waste management, and recycling. • **Verification Methods:** o Online or written quizzes on digital research skills and information evaluation. o Short assignments requiring learners to collect and summarize digital resources on green practices. **2. Practical Use of Digital Tools** • **Criteria:** Effective use of basic digital applications and platforms (e.g., word processing, spreadsheets, presentation software, learning management systems) for vocational and sustainability tasks. • **Verification Methods:** o Completion of assignments or reports using digital tools. o Demonstration of using spreadsheets or digital forms to record or analyze waste/recycling data.

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	○ Submission of digital presentations summarizing project or case study results. **3. Digital Communication and Collaboration** • **Criteria:** Ability to communicate and collaborate through digital means in individual or group tasks. • **Verification Methods:** ○ Observation of participation in online discussions, forums, or collaborative documents. ○ Evaluation of group projects or peer-reviewed assignments completed via digital platforms. **4. Application of Digital Tools for Sustainability** • **Criteria:** Use of digital solutions to support environmentally friendly practices, such as digital monitoring, reporting, or awareness campaigns. • **Verification Methods:** ○ Project-based tasks where learners apply digital tools to track, document, or present green practices. ○ Assessment of practical exercises demonstrating efficiency improvements or data-driven sustainability decisions. **5. Responsible and Ethical Use of Digital Technologies** • **Criteria:** Demonstration of ethical, safe, and environmentally conscious use of digital tools. • **Verification Methods:** ○ Observation of proper citation and responsible use of online resources. ○ Reflection tasks or self-assessment on ethical and environmentally conscious digital behaviors. **6. Adaptability and Innovation** • **Criteria:** Ability to adopt new digital tools or platforms to enhance learning, problem-solving, or sustainable practices. • **Verification Methods:**

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	○ Evaluation of learner engagement with new digital applications introduced during the unit. ○ Assessment of innovative solutions or suggestions for digital tools supporting green practices. **Assessment Approach:** A **rubric-based evaluation** will be applied, combining **formative assessments** (quizzes, observation, peer/self-assessment) and **summative assessments** (projects, digital assignments, presentations). This ensures a comprehensive measurement of both the **technical skills** and **applied digital behaviors** required to meet the learning outcomes.

2.3. Pedagogical competencies

Description of the competence	Within the teaching unit *"Understanding Green Practices in VET"*, **pedagogical competencies** focus on learners' ability to engage in effective learning processes, participate in collaborative learning, and reflect critically on knowledge and practice. These competencies emphasize **learning-to-learn skills**, communication, and the ability to transfer knowledge to practical and professional contexts. The pedagogical competencies included in this unit are: **1. Learning-to-Learn Competence** • Learners develop the ability to manage their own learning processes, set learning goals, monitor progress, and reflect on outcomes. • This includes self-directed learning related to environmental practices, sustainable resource management, and green vocational skills. **2. Critical Thinking and Problem-Solving** • Learners acquire the ability to analyze environmental challenges in vocational contexts, evaluate information, and propose practical, evidence-based solutions.

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	• This competence supports decision-making in sustainability-related tasks and workplace problem solving. **3. Collaboration and Teamwork** • Learners develop skills for effective participation in group projects, peer learning, and cooperative problem-solving activities. • Emphasis is placed on communication, negotiation, and consensus-building within diverse teams. **4. Reflective Practice** • Learners are encouraged to reflect on their own learning, vocational practices, and the environmental impact of their actions. • Reflection promotes continuous improvement and supports the development of professional and ethical awareness. **5. Transfer of Knowledge to Practice** • Learners develop the ability to apply knowledge and skills acquired during the unit to real-life vocational settings. • This includes integrating green practices into workplace routines, community projects, or entrepreneurial activities. **6. Motivation and Self-Efficacy in Learning** • The unit fosters learners' confidence, motivation, and engagement with learning activities. • Learners develop the mindset to take initiative, persist in learning tasks, and embrace sustainable practices as part of professional development. These pedagogical competencies ensure that learners are not only **technically skilled** but also capable of **independent learning, critical reflection, collaboration, and practical application**—all essential for adapting to modern, environmentally conscious vocational work environments.
Description of the Learning Outcomes related to this competence	Upon successful completion of the teaching unit *"Understanding Green Practices in VET"*, learners will be able to demonstrate the following **learning outcomes** related to pedagogical competencies:

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	8. **Manage their own learning process** by setting goals, planning tasks, monitoring progress, and reflecting on achievements in relation to green practices and sustainability. 9. **Analyze and solve problems** related to waste management, recycling, and environmentally responsible practices, using critical thinking and evidence-based reasoning. 10. **Work effectively in teams**, demonstrating collaboration, communication, and negotiation skills during group projects, case studies, or practical activities focused on sustainable vocational practices. 11. **Reflect on personal and professional practice**, evaluating the environmental impact of their actions and identifying opportunities for improvement in learning and workplace contexts. 12. **Apply knowledge and skills in real-life contexts**, transferring lessons learned from the classroom to workplace environments, vocational tasks, or community-based sustainability projects. 13. **Demonstrate motivation, initiative, and self-efficacy**, engaging actively in learning activities, participating in discussions, and showing responsibility for sustainable outcomes in vocational settings. 14. **Evaluate and adapt learning strategies**, showing the ability to adjust approaches to tasks, projects, and challenges related to green practices and vocational competencies. These learning outcomes ensure that learners not only **acquire knowledge and technical skills**, but also develop the ability to **learn independently, think critically, collaborate effectively, reflect on actions, and apply learning in real-world situations**—all essential for lifelong learning and professional development in sustainable vocational education.
Description of the evaluation criteria	The acquisition of **pedagogical competencies** in the teaching unit *"Understanding Green Practices in VET"* will be verified using a combination of **formative and summa-**

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	tive assessment methods, focusing on learners' ability to manage learning, reflect critically, collaborate, and apply knowledge in practical contexts. **1. Self-Directed Learning and Learning-to-Learn Skills** • **Criteria:** Ability to set learning goals, plan tasks, monitor progress, and reflect on achievements. • **Verification Methods:** o Learning journals or reflective logs documenting personal progress and strategies. o Self-assessment checklists evaluating completion of tasks and goal achievement. o Short presentations where learners outline their learning process and lessons learned. **2. Critical Thinking and Problem-Solving** • **Criteria:** Ability to analyze environmental challenges, evaluate solutions, and make evidence-based decisions. • **Verification Methods:** o Case studies or problem-based tasks where learners propose solutions to waste and recycling challenges. o Scenario-based exercises simulating real workplace problems requiring sustainable solutions. o Rubric-based evaluation of analytical reasoning and solution feasibility. **3. Collaboration and Teamwork** • **Criteria:** Effective participation in group activities, communication, and negotiation. • **Verification Methods:** o Observation of learners' roles and contributions in group projects or collaborative exercises. o Peer-assessment evaluating communication, cooperation, and shared responsibility.

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	○ Assessment of group project outcomes, including joint reports or presentations. **4. Reflective Practice** • **Criteria:** Ability to reflect on personal actions, vocational tasks, and environmental impact. • **Verification Methods:** ○ Reflective essays or reports analyzing individual contributions and lessons learned. ○ Guided reflection questions after practical exercises or site visits. ○ Assessment of the depth and relevance of reflections using a standardized rubric. **5. Application of Knowledge to Practice** • **Criteria:** Ability to transfer learned concepts to real-life vocational or community contexts. • **Verification Methods:** ○ Practical projects or workplace-based tasks implementing green practices. ○ Assessment of project reports demonstrating correct application of knowledge. ○ Observation of learners performing sustainable actions in simulated or real vocational tasks. **6. Motivation, Initiative, and Self-Efficacy** • **Criteria:** Active engagement, persistence in tasks, and proactive behavior in learning and sustainable practices. • **Verification Methods:** ○ Teacher observation of participation in class and group activities. ○ Self-assessment questionnaires measuring confidence and initiative. ○ Recognition of learners proposing innovative or voluntary sustainability actions.

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	Assessment Approach: A **rubric-based evaluation framework** combining **formative assessments** (observations, peer/self-assessment, reflective tasks) and **summative assessments** (projects, presentations, reports) will be applied. This ensures that learners' pedagogical competencies are measured comprehensively, covering their **knowledge, practical skills, collaboration, reflection, and personal development**.

3. Learning outcomes

By the end of this course, students should be able to:

	Knowledge	**Skills**	**Competences**
LO1	By the end of the teaching unit *"Understanding Green Practices in VET"*, learners should be able to: 7. **Understand fundamental environmental concepts** ○ Define and explain key terms such as waste management, recycling, circular economy, resource efficiency, and sustainable practices. 8. **Recognize the importance of environmental sustainability** ○ Explain why sustainable practices are essential for workplaces, communities, and society.	By the end of the teaching unit *"Understanding Green Practices in VET"*, learners will acquire the following **skills**: 6. **Practical Environmental Skills** ○ Apply waste separation, recycling, and resource-efficient practices in vocational and workplace contexts. ○ Implement circular economy principles, such as reuse, repair, and material optimization. 7. **Digital Skills** ○ Use digital tools to docu-	Upon completing the unit, learners will develop the following **competences**: 5. **Ecological Competence** ○ Demonstrate environmentally responsible behavior and pro-environmental attitudes. ○ Integrate green practices into vocational tasks, promoting sustainable decision-making. 6. **Digital Competence** ○ Utilize technology responsibly and effectively to support learning, communication, and sustainability initiatives.

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	○ Understand the relationship between vocational activities and environmental impact. 9. **Identify waste types and management methods** ○ Differentiate between municipal, industrial, hazardous, and recyclable waste. ○ Describe appropriate methods for reducing, separating, recycling, and safely disposing of waste. 10. **Understand relevant regulations and frameworks** ○ Identify national environmental laws in Kosovo/Albania and relevant EU directives, including the Waste Framework Directive and EU Green Deal principles. ○ Explain how regulations impact vocational practices and workplace compliance.	ment, monitor, and report environmental practices. ○ Communicate and collaborate effectively via digital platforms for sustainability-related tasks. 8. **Problem-Solving and Analytical Skills** ○ Identify environmental challenges in workplaces or VET settings. ○ Analyze information, evaluate alternatives, and propose practical, evidence-based solutions. 9. **Project and Teamwork Skills** ○ Participate effectively in group projects, case studies, and workshops. ○ Plan, execute, and present sustainability projects collaboratively. 10. **Reflective and Self-Management Skills** ○ Monitor personal learning and professional performance related to	7. **Pedagogical Competence** ○ Manage personal learning and reflect critically on vocational practices. ○ Collaborate, communicate, and solve problems in group and workplace contexts. 8. **Transversal/Key Competence** ○ Apply knowledge, skills, and attitudes in new and complex vocational or community situations. ○ Demonstrate adaptability, initiative, and continuous learning in alignment with sustainability goals. These **skills and competences** together ensure that learners can **not only understand sustainability concepts but also actively implement them**, use digital tools, collaborate effectively, and continuously improve their practices in vocational environments.

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	11. **Understand the role of technology in supporting green practices** ○ Describe how digital tools and platforms can be used to monitor, report, and improve environmental practices in vocational settings. 12. **Recognize the importance of personal and professional responsibility** ○ Understand the ethical and social dimensions of adopting environmentally responsible behavior in the workplace and learning environments. This knowledge-focused learning outcome ensures that learners acquire a **solid theoretical foundation** before moving on to practical applications, problem-solving, and behavioral competencies.	environmental responsibility. ○ Evaluate and adjust personal and group practices to improve outcomes.	
LO2	Learners should be able to: 5. Explain advanced concepts in **waste management, recycling, and circular economy**.	Learners should be able to: 6. **Implement practical sustainability measures** in vocational	Learners should develop the following competences: 5. **Ecological Competence** – Inte-

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	6. Understand the **environmental impact of vocational activities** and the importance of sustainability for workplaces and society. 7. Identify and describe **national and EU environmental regulations**, policies, and directives relevant to waste and sustainability. 8. Recognize the role of **digital tools** in supporting sustainable practices, monitoring, and reporting environmental performance. Understand the principles of **green behavior, ethical responsibility, and professional conduct** in environmental management.	activities (waste reduction, separation, recycling, resource efficiency). 7. **Use digital tools effectively** to document, monitor, and communicate environmental practices. 8. **Analyze and solve environmental problems**, evaluating alternatives and proposing practical, evidence-based solutions. 9. **Plan and participate in group projects or workplace initiatives**, demonstrating teamwork, collaboration, and communication skills. 10. **Reflect on personal and professional practices**, adapting strategies to improve sustainability outcomes and learning progress.	grate environmentally responsible practices into vocational tasks, showing awareness of sustainability and circular economy principles. 6. **Digital Competence** – Use technology ethically and efficiently to support sustainable practices and vocational learning. 7. **Pedagogical/Transversal Competence** – Manage learning, collaborate effectively, think critically, and apply knowledge in practical contexts. 8. **Personal and Professional Competence** – Demonstrate initiative, responsibility, and adaptability in implementing sustainable practices in workplace and community settings. This LO2 ensures that learners **not only understand environmental concepts but can also actively apply them**, use technology to support sustainable practices, collaborate effectively, and take personal responsibility for green behaviors in vocational environments.

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LO3	Learners should be able to: 4. Understand the **ethical and social dimensions** of environmental sustainability and green practices in vocational contexts. 5. Explain the **long-term impact of personal and professional decisions** on the environment and communities. 6. Recognize the importance of **sustainability as a core value** in modern vocational practice and lifelong learning. Understand the role of **individual and collective responsibility** in supporting green initiatives, both in the workplace and society.	Learners should be able to: 6. **Demonstrate pro-environmental behaviors** consistently in learning and vocational environments (e.g., waste reduction, responsible resource use). 7. **Engage in reflective practice**, assessing the environmental and social impact of their own actions. 8. **Advocate and promote sustainability** in group activities, projects, and workplace initiatives. 9. **Integrate ethical considerations** into decision-making when implementing vocational tasks. 10. **Encourage collaboration and shared responsibility** for sustainability among peers and colleagues.	Learners should develop the following competences: 5. **Ecological and Sustainability Competence** – Demonstrate ethical awareness and personal commitment to environmentally responsible behavior in vocational and everyday contexts. 6. **Digital Responsibility Competence** – Use digital tools and platforms in ways that are environmentally conscious and ethically sound. 7. **Pedagogical and Social Competence** – Actively participate in collaborative and reflective learning processes, promoting sustainability and ethical practices. 8. **Personal and Civic Competence** – Exhibit initiative, responsibility, and commitment to sustainable development as a core personal and professional value. **Summary:** LO3 ensures that learners **internalize**

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			sustainable values and ethical attitudes, complementing the knowledge (LO1) and practical skills (LO2) developed earlier. Together, LO1–LO3 create a **holistic learning outcome framework**, integrating **knowledge, skills, and competences** across ecological, digital, and pedagogical dimensions.

4. Teaching contents of the Unit *(the following are proposals for the content of the unit)*

Module 1: Understanding Green Practices in VET.			
Module number & title	**Content type**	**Content development**	**Notes**
1.2 **Module Introduction to Green Practices and Sustainable Development in VET**.	Paragraph/Heading	**Green Practices and Sustainability Concepts**. This module introduces the fundamental concepts of green practices, sustainability, and sustainable development, emphasizing their relevance to vocational education and training (VET). **Sustainable Development Goals (SDGs) and Education.** The module explains the United Nations Sustainable Development Goals, with particular focus on goals related to education, climate action, responsible consumption, and decent work. Learners gain an understanding of how VET institutions contribute to sustainability by preparing a skilled workforce capable of supporting green economies and environmentally responsible practices	
1.2 Module	Paragraph/Heading	**Global and Regional Environmental Challenges.** This module explores key environmental challenges such as climate change, pollution, waste generation,	

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Environmental Challenges and the Role of VET Systems		and resource depletion at global and regional levels. **VET as a Driver for Environmental Change.** The role of VET systems in addressing environmental challenges through skills development and workforce transformation is examined. Learners analyze how vocational skills and qualifications can directly support green industries, environmental protection, and sustainable economic development.	
1.3 Module **Policy and Regulatory Frameworks for Green VET**	Paragraph/Heading	**EU Green Deal and Environmental Policies** This module introduces EU environmental and climate policies, including the European Green Deal and circular economy strategies. **National Environmental and VET Policies** The alignment of national policies in Kosovo and Albania with EU frameworks is discussed. Learners understand how policy frameworks shape green practices in VET institutions and influence curriculum design and occupational standards.	
1.4. Module: **Circular Economy Principles in Vocational Education**	Paragraph/Heading	**Concept and Principles of the Circular Economy** This module explains the principles of the circular economy, including reuse, recycling, recovery, and resource efficiency. **Circular Economy in VET Curricula** Examples of integrating circular economy concepts into vocational training programs are presented. Learners explore how vocational skills contribute to waste reduction and sustainable production processes in different economic sectors.	
1.5. Module: **Waste Management and Recycling**	Paragraph/Heading	**Waste Streams and Management Systems** This module introduces types of waste generated in VET institutions, including industrial, electronic, and hazardous waste. **Recycling and Waste Reduction Practices**	

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Practices in VET Institutions		Practical approaches to waste separation, recycling, and reduction within educational institutions are discussed. Learners examine real-life examples of effective waste management practices and their environmental and economic benefits.	
1.6. Module: **Energy Efficiency and Renewable Energy in VET**	Paragraph/Heading	**Energy Consumption in Education and Industry** This module analyzes patterns of energy use in VET institutions and vocational workplaces. **Renewable Energy Technologies** The basics of renewable energy sources such as solar, wind, and biomass are introduced. Learners understand how energy-efficient technologies and renewable energy systems can be integrated into vocational training and daily institutional operations.	
1.7. Module: **Green Skills and Competences for the Labor Market**	Paragraph/Heading	**Definition and Types of Green Skills** This module defines green skills and distinguishes between technical, transversal, and digital green competences. **Labor Market Needs and Green Jobs** The demand for green skills in emerging and transforming sectors is explored. Learners identify key competences required for green jobs and understand how VET qualifications support employability in sustainable industries.	
1.8. Module: **Sustainable Resource Management and Eco-Innovation**	Paragraph/Heading	**Efficient Use of Natural Resources** This module addresses sustainable management of water, raw materials, and energy resources. **Eco-Innovation and Green Technologies** Innovative technologies and processes that reduce environmental impact are presented.	

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		Learners explore how eco-innovation drives competitiveness and sustainability in vocational occupations and enterprises.	
1.9. Module: **Green Practices in VET Institutions and Work-Based Learning**	Paragraph/Heading	**Institutional Green Management Practices** This module examines how VET institutions implement green strategies in governance, infrastructure, and daily operations. **Work-Based Learning and Industry Cooperation** The integration of green practices into apprenticeships and workplace learning is discussed. Learners understand the importance of collaboration between VET providers and enterprises in promoting sustainable practices.	
1.10. Module: **Monitoring, Evaluation, and Continuous Improvement of Green Practices**		**Measuring Environmental Performance** This module introduces indicators and tools for monitoring environmental performance in VET institutions. **Continuous Improvement and Quality Assurance** Approaches for evaluating and improving green practices over time are explored. Learners develop awareness of continuous improvement processes and the role of evaluation in achieving long-term sustainability in VET systems.	
	Note	Columns layout (for textbook / digital learning platform)	
	ColumnsText column 1	**Concept of Green VET** Green VET integrates environmental sustainability into vocational education, helping learners acquire skills needed for green jobs and sustainable industries.	Image: **green-vet-training.jpg** (example: students working with solar panels or

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<table>
<tr><td></td><td></td><td></td><td>recycling work-shop)</td></tr>
<tr><td></td><td>Text column 2</td><td>Example from Albania VET schools integrate sustainable tourism and eco-friendly hospitality training, encouraging energy saving and waste reduction practices in hotels and tourism services.</td><td></td></tr>
<tr><td></td><td>Text column 3</td><td>Example from Kosovo Technical schools introduce training in solar panel in-stallation, energy-efficient construction, and environmental management prac-tices in workshops.</td><td></td></tr>
<tr><td></td><td>Table</td><td>
<table>
<tr><td>Column 1 – Solar Energy Training</td><td>Column 2 – Energy-Effi-cient Construction</td><td>Column 3 – Environ-mental Management</td></tr>
<tr><td>Row 1: Students learn the basics of photovol-taic systems and how solar panels generate electricity.</td><td>Row 1: Students study materials and building techniques that reduce energy consumption in buildings.</td><td>Row 1: Students study materials and building techniques that reduce energy consumption in buildings.</td></tr>
<tr><td>Row 2: Practical work-shops include installa-tion, maintenance, and safety procedures for solar systems.</td><td>Row 2: Training includes insulation methods, ef-ficient lighting systems, and sustainable con-struction standards.</td><td>Row 2: Learners prac-tice sorting waste, re-source efficiency, and environmental monitor-ing in school workshops aligned with practices promoted across the Kosovo VET sector.</td></tr>
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<tr><td></td><td>Divider</td><td>By default, dividers are labeled as CONTINUE, but you can customize this label</td><td></td></tr>
</table>

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		as needed.	
2.	Statement	Green practices in Vocational Education and Training (VET) support the transition toward sustainable economies by equipping learners with environmental awareness, resource-efficient skills, and knowledge aligned with European sustainability goals. In Albania and Kosovo, integrating green competencies into VET contributes to workforce readiness, environmental protection, and alignment with standards promoted by the European Union.	
3.	List	• Renewable energy training (solar installation & maintenance) 40% • Energy-efficient construction & sustainable materials 35% • Waste management, recycling & environmental protection 25%	Use a bulleted list
4.	Chart	**Item 1 = 25%:** Item 1. Foundations of Sustainable Development and Green Economy (basic concepts, environmental challenges, relevance for VET learners) **Item 2 = 15%:** European Green Policies and Standards relevant to VET (e.g., frameworks promoted by the European Union and alignment with national education reforms in Albania and Kosovo) **Item 3 = 10%:** Environmental Awareness and Green Mindset in Vocational Education (responsible consumption, workplace sustainability culture) **Item 4 = 30%:** Practical Green Skills in VET Programs (renewable energy basics, energy-efficient construction, sustainable materials, and eco-friendly workshop practices) **Item 5 = 20%:** Community Impact and Green Jobs in Albania and Kosovo (labor market opportunities, local sustainability initiatives, and future skills demand)	Use a line chart
5. Image **Renewable**	Image	Renewable energy training in Vocational Education and Training (VET) equips learners with practical skills in solar panel installation, system maintenance,	https://solar-

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energy training in Vocational Education and Training (VET)		and basic energy management. This training supports the transition toward cleaner energy sources while preparing students for emerging green jobs in Albania and Kosovo. By learning how photovoltaic systems work, how to install them safely, and how to maintain efficiency over time, trainees gain competencies that are increasingly demanded in modern labor markets. The approach also aligns with sustainability priorities promoted by the European Union, encouraging environmentally responsible practices and supporting regional efforts to reduce carbon emissions and increase renewable energy adoption.	training.org/staff-training-options/ 
Energy-efficient construction & sustainable materials	Image	Energy-efficient construction and the use of sustainable materials are key components of green skills development in Vocational Education and Training (VET). Through practical learning, students understand insulation techniques, energy-saving building design, and the selection of environmentally friendly materials that reduce environmental impact. These competencies help future technicians and construction workers contribute to greener infrastructure in Albania and Kosovo. Training also highlights cost efficiency, improved building performance, and reduced carbon emissions across the construction sector. Such knowledge aligns with sustainability standards encouraged by the European Union, supporting the transition toward more resilient, climate-conscious buildings and modern construction practices.	
Waste management, recycling & environmental protection	Image	Waste management, recycling, and environmental protection are essential components of green practices in Vocational Education and Training (VET). In workshops and training centers, students learn how to properly sort waste, reuse materials, reduce resource consumption, and handle potentially harmful substances safely. These practices encourage responsible behavior in technical professions such as construction, manufacturing, and services. By integrating environmental protection into daily training activities, VET institutions help learners understand the impact of their work on ecosystems and communities. This approach strengthens practical skills while promoting sustainable habits	

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		that can be applied in workplaces and local industries across Albania and Kosovo.	
6. Video & audio	Video	**Renewable energy training in Vocational Education and Training (VET) – Video:** https://www.youtube.com/watch?v=hBsGnXpOE9A	https://www.youtube.com/watch?v=hBsGnXpOE9A
6. Video & audio	Video	Energy-efficient construction & sustainable materials video: https://www.youtube.com/watch?v=AQJFVJJLgf4	https://www.youtube.com/watch?v=AQJFVJJLgf4
6. Video & audio	Audio	Waste management, recycling & environmental protection video:. https://www.youtube.com/watch?v=8krzjlHaGes	Waste Management
7. Files	File	https://www.youtube.com/watch?v=kZIrIQDf1nQ	https://www.youtube.com/watch?v=kZIrIQDf1nQ
8. Accordion and tabs	Accordion	Accordion 1: Foundations of Green Practices in VET	Add images (filename.jpg)
	Accordion	Practical Application of Sustainable Skills in VET	Add video file (filename.mp4)
8. Accordion and tabs	Tab	Tab 1: Header: Foundations of Green Practices in VET Description: This section introduces the basic concepts of green practices and sustainable development within Vocational Education and Training (VET). Learners explore how environmental responsibility, resource efficiency, and climate awareness are becoming essential elements of modern vocational skills. The content explains why green competencies are important for industries such as construction, energy, agriculture, and manufacturing. It also highlights how integrating	Add image (filename.jpg)

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		sustainability into training programs helps prepare students for future labor market demands. The module connects local developments in Albania and Kosovo with broader sustainability strategies supported by the European Union, encouraging VET institutions to adopt environmentally responsible training approaches.	
	Tab	TAB 2 Header 1: Practical Application of Sustainable Skills in VET Description: This section focuses on how green practices are applied in real vocational learning environments. Students are introduced to practical activities such as energy-saving techniques, responsible use of materials, recycling practices, and environmentally friendly workshop management. The aim is to help learners translate sustainability concepts into daily professional tasks. Examples from VET schools and training centers in Albania and Kosovo demonstrate how institutions can integrate green technologies and practices into curricula. By combining theory with hands-on experience, this part of the module strengthens learners' readiness for green jobs and supports the transition toward more sustainable economic development.	Add video file (filename.mp4)
9. Labeled graphic	Labeled graphic	**Marker 1 – Image** **Title:** Renewable Energy in Practice **Description:** This marker includes an image of an air balloon symbolizing innovation, clean energy exploration, and new perspectives in sustainable education. In the context of VET, it can represent the introduction of renewable energy technologies and modern training approaches that prepare learners for green careers and environmentally responsible practices.	Add image (filename.jpg)

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		Marker 2 – Infographic **Title:** Water and Ecosystem Awareness **Description:** This marker presents an infographic about lakes, highlighting the importance of water resources, environmental protection, and ecosystem balance. It can be used to explain how sustainable practices in vocational sectors—such as construction, tourism, and agriculture—help protect natural resources and promote responsible environmental management.	Add image (file-name.jpg)
		Marker 3 – Audio **Title:** Additional Learning Resource **Description:** This marker allows the addition of an audio clip where instructors or experts can provide further explanations about green practices, sustainability principles, or real examples from VET institutions in Albania and Kosovo. Audio content helps learners better understand concepts through guided commentary or short educational briefings.	Add audio (file-name.mp3)
		Marker 4 – Text **Title:** Nature and Sustainable Landscapes **Description:** This marker contains text describing a mountain environment, symbolizing natural heritage and environmental responsibility. It can be used to discuss how vocational education supports sustainable development by promoting eco-friendly construction, tourism practices, and protection of natural landscapes.	
10.Scenario	Scenario	**Slide 1: Scenario Introduction** **Character & Background** • Character: A middle-aged businesswoman • Setting: Office environment • Role: She represents a customer navigating sustainability challenges in vocational education and training (VET). **Instructions for Learners**	

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		• You are placed in a virtual "escape room" scenario. • To progress, you must **navigate customer situations** by applying **empathy skills**. • Each correct response unlocks the next level, bringing you closer to "escaping" the room. • Focus on listening, understanding perspectives, and responding with empathy in the context of **green practices and sustainable development in VET** (Albania and Kosovo).	
		Slide 2: Scenario **Scenario Text** A training center struggles with high energy costs. The customer asks how sustainable practices can reduce expenses without disrupting daily operations. **Instruction Text** Listen carefully, show empathy, and suggest green solutions. Correct answers unlock the next step toward escaping the room.	
		Slide 3: Closing **Closing Text** You've completed the escape room journey. By applying empathy and green practices, you've shown how VET can drive sustainable development in Albania and Kosovo. **Instruction Text** Reflect on the scenarios, share your insights, and consider how empathy and sustainability can guide real-world vocational training challenges.	
11.Timeline	Timeline	Date 1: 2026 **Date 1: 2026** Vocational training centers in Albania and Kosovo begin integrating basic green practices—energy efficiency, waste reduction, and awareness campaigns.	
		Date 2: 2024 **Date 2: 2027** Sustainability becomes embedded in curricula. Training centers	

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		adopt renewable energy solutions, promote recycling, and strengthen empathy-driven approaches to customer engagement.	
12.Flashcards	Flashcards	**Flashcard 1** **Front: Image** *Visual suggestion*: A vocational training classroom with solar panels or energy-efficient lighting. **Back: Text** *Text*: "Green practices in VET reduce costs, save energy, and build sustainable skills for future generations."	
		Flashcard 2 **Front: Image** *Visual suggestion*: Recycling bins in a training center labeled for paper, plastic, and electronics. **Back: Image** *Visual suggestion*: Infographic showing the recycling cycle (collection → processing → reuse).	
		Flashcard 3 **Front: Text** *Text*: "Empathy and sustainability go hand in hand in vocational training." **Back: Image** *Visual suggestion*: A businesswoman listening attentively to a student, with green icons (leaf, energy bulb, recycle symbol) in the background.	
13. Multiple choice and multiple response	Multiple choice	**Question 1** Which green practice can help vocational training centers in Albania and Kosovo reduce costs while supporting sustainability? **Answer 1** Introduce energy-efficient lighting and equipment. **Feedback**: Correct! Energy efficiency lowers expenses and supports long-term sustainability. **Answer 2** Ignore energy use and focus only on customer service. **Feedback**: Not quite. While customer service is important, neglecting energy practices increases costs and harms sustainability goals.	Specify here the right answer.
13. Multiple choice and	Multiple answer	**Question 1** Which of the following actions support sustainable development in vocational	Specify here the right answers.

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multiple response		training centers in Albania and Kosovo? **Answer 1** Implement recycling programs for paper and plastics. • **Feedback**: Correct! Recycling reduces waste and promotes environmental responsibility. **Answer 2** Increase reliance on single-use materials for convenience. • **Feedback**: Not correct. Single-use materials increase waste and harm sustainability goals.	
14. Matching and fill in the blank	Matching	First choice / First match Second choice / Second match Third choice / Third match Matching Exercise **First choice / First match** • **Choice:** Recycling programs • **Match:** Reduce waste and promote responsibility **Second choice / Second match** • **Choice:** Energy-efficient lighting • **Match:** Lower electricity costs **Third choice / Third match** • **Choice:** Sustainable procurement • **Match:** Encourage eco-friendly supply chains	
14. Matching and fill in the blank	Fill in the blank	**Matching Exercise** **Question:** Match each green practice with its benefit in VET centers. • **Practices:** 1. Recycling programs 2. Energy-efficient lighting 3. Sustainable procurement • **Benefits:** A. Reduces waste and promotes responsibility B. Lowers electricity costs C. Encourages eco-friendly supply chains **Correct Matches:** 1 → A 2 → B 3 → C	Specify here the missing word or words.

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		Fill-in-the-Blank Exercise **Question:** Vocational training centers in Albania and Kosovo can reduce costs by adopting _____ solutions such as solar panels and efficient equipment. **Answer:** Renewable energy **Feedback:** Correct! Renewable energy solutions lower expenses and support sustainable development.	

5 Activities (examples)

Module 1: Understanding Green Practices in VET			
Module number & title	**Activity type**	**Activity development**	**Notes**
Flashcards 1. **What Are Green Practices?**	Flashcards	**Flashcard 1** **Activity: What Are Green Practices?** **Front:** An illustration showing a VET workshop with solar panels on the roof, recycling bins, and students working with eco-friendly tools. **Back:** Green practices are environmentally responsible actions that reduce negative impacts on nature. In VET, they include energy efficiency, waste reduction, sustainable resource use, and environmentally friendly technologies.	
Flashcards 2. **Circular Economy in Practice**	Flashcards	**Flashcard 2** **Activity: Circular Economy in Practice** **Front:** A circular diagram showing stages: *Reduce* → *Reuse* → *Repair* → *Recycle*. **Back:** The circular economy aims to keep materials and products in use for as long as	

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		possible. In VET, it supports skills such as repair, recycling, and sustainable production instead of "use and throw" models.	
Flashcards 3. **Waste Management in VET Institutions**	Flashcards	**Flashcard 3** **Activity: Waste Management in VET Institutions** **Front:** Color-coded waste bins (paper, plastic, metal, organic waste) placed inside a vocational school or training center. **Back:** Proper waste management includes waste separation, recycling, and safe disposal. VET institutions can reduce environmental impact by teaching learners how to manage waste responsibly in workshops and workplaces.	
Flashcards 4		**Flashcard 4** **Activity: Green Skills for the Labor Market** **Front:** A worker wearing safety equipment installing solar panels or maintaining energy-efficient machinery. **Back:** Green skills combine technical knowledge, environmental awareness, and problem-solving abilities. These skills are essential for green jobs and increase employability in sustainable industries.	
Multiple choice and multiple response	Multiple choice	**Question 1** Which green practice can help vocational training centers in Albania and Kosovo reduce costs while supporting sustainability? **Answer 1** Introduce energy-efficient lighting and equipment. **Feedback**: Correct! Energy efficiency lowers expenses and supports long-term sustainability.	Specify here the right answer.

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		Answer 2 Ignore energy use and focus only on customer service. **Feedback**: Not quite. While customer service is important, neglecting energy practices increases costs and harms sustainability goals.	
Multiple choice and multiple response	Multiple answer	**Question 1** Which of the following actions support sustainable development in vocational training centers in Albania and Kosovo? **Answer 1** Implement recycling programs for paper and plastics. • **Feedback**: Correct! Recycling reduces waste and promotes environmental responsibility. **Answer 2** Increase reliance on single-use materials for convenience. **Feedback**: Not correct. Single-use materials increase waste and harm sustainability goals.	Specify here the right answers.
Matching and fill in the blank	Matching	First choice / First match Second choice / Second match Third choice / Third match Matching Exercise **First choice / First match** • **Choice:** Recycling programs • **Match:** Reduce waste and promote responsibility **Second choice / Second match** • **Choice:** Energy-efficient lighting • **Match:** Lower electricity costs **Third choice / Third match** • **Choice:** Sustainable procurement • **Match:** Encourage eco-friendly supply chains	
Matching and fill in the blank	Fill in the blank	**Matching Exercise** **Question:** Match each green practice with its benefit in VET centers. • **Practices:** 1. Recycling programs	Specify here the missing word or words.

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		2. Energy-efficient lighting 3. Sustainable procurement • **Benefits:** A. Reduces waste and promotes responsibility B. Lowers electricity costs C. Encourages eco-friendly supply chains **Correct Matches:** 1 → A 2 → B 3 → C **Fill-in-the-Blank Exercise** **Question:** Vocational training centers in Albania and Kosovo can reduce costs by adopting _____ solutions such as solar panels and efficient equipment. **Answer:** Renewable energy **Feedback:** Correct! Renewable energy solutions lower expenses and support sustainable development.	
Digital map	Digital map	**Digital Map Activity** **Task:** Learners will explore a digital map showing local recycling points in Albania and Kosovo. **Instructions:** • Identify the nearest recycling point to your training center. • Discuss how accessibility to recycling facilities supports sustainable practices in VET. • Reflect on how empathy skills can be applied when guiding customers or peers toward using these facilities. **Learning Outcome:** Students connect **green practices** with real-world local infrastructure, reinforcing sustainability awareness and practical application.	
Design of a small waste-separation system within the institution		**Activity: Designing a Waste-Separation System** **Task:** Learners design a small waste-separation system within their institution to promote sustainable practices. **Instructions:** • Identify 3–4 categories of waste (e.g., paper, plastics, organic, electronic). • Assign clearly labeled bins for each category.	

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		• Place bins in accessible areas such as classrooms, workshops, and offices. • Create simple awareness posters to guide proper use. **Learning Outcome:** Students understand how waste separation reduces environmental impact, encourages responsibility, and supports sustainable development in VET centers.	
Digital simulation		Activity: Digital Simulation – Container Life Cycle **Task:** Learners explore a digital simulation showing the journey of a container from production to disposal or recycling. **Simulation Stages:** 5. **Production** – Raw materials are extracted and processed. 6. **Usage** – The container is used in vocational training or daily institutional activities. 7. **Disposal** – The container is discarded after use. 8. **Recycling/Reuse** – The container is collected, processed, and reintroduced into the cycle. **Instructions:** • Follow the container through each stage in the simulation. • Identify environmental impacts at each stage. • Suggest improvements (e.g., sustainable materials, better recycling practices). **Learning Outcome:** Students gain awareness of the **full life cycle of materials**, connecting sustainability concepts to practical actions in VET institutions.	
Digital awareness	Videos, infographics	**Activity: Digital Awareness Campaigns** **Task:** Learners design short digital campaigns (videos, infographics, or social media posts) to raise awareness about green practices in vocational training centers. **Instructions:**	

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		• Choose a sustainability topic (e.g., recycling, energy efficiency, water conservation). • Create a 1–2 minute video or an infographic highlighting the importance of the practice. • Use clear visuals, simple language, and empathy-driven messaging to connect with the audience. • Share the campaign digitally within the institution or community. **Learning Outcome:** Students learn how to **communicate sustainability effectively**, combining creativity, empathy, and digital skills to promote green practices in VET.	
Hackathon	Hackathon	**Activity: Mini Hackathon – Green Practices in VET** **Task:** Learners participate in a short hackathon to design innovative solutions that promote sustainability in vocational training centers in Albania and Kosovo. **Instructions:** • Form small teams (3–5 participants). • Identify a sustainability challenge (e.g., energy use, waste management, recycling, water conservation). • Brainstorm and prototype a practical solution (digital tool, awareness campaign, or physical system). • Present ideas in a 5-minute pitch to peers and instructors. **Learning Outcome:** Students practice collaboration, creativity, and problem-solving while applying **green practices** and **empathy skills** to real-world VET challenges.	

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6. Methodology

5.1. Project-Based Learning (PBL) and collaborative Learning	• Project-Based Learning (PBL) is used as a core methodology to engage learners in solving real or simulated environmental challenges related to green practices in VET. Learners work in teams to design, analyze, and propose sustainable solutions, such as waste reduction plans or energy-efficiency improvements for VET institutions or enterprises. • Collaborative learning supports PBL by encouraging teamwork, peer learning, and shared responsibility. Through group tasks and joint decision-making, learners develop communication, problem-solving, and critical-thinking skills while applying sustainability concepts in practice.
5.2. Collaborative learning between institutions in Albania and Kosovo	• This methodology promotes cross-institutional collaboration between VET providers in Albania and Kosovo. Learners and teachers participate in joint activities, such as virtual group projects, shared case analyses, and comparative discussions on national green practices. • By exchanging experiences and perspectives, learners gain regional and European awareness of sustainability challenges and solutions. This approach strengthens intercultural competences, regional cooperation, and alignment with EU education and environmental standards.
5.3. Blended Learning	• Blended learning combines face-to-face teaching with online learning activities. Classroom instruction is complemented by digital resources, self-paced learning materials, and online discussions. • This methodology allows flexibility in learning, supports different learning styles, and enhances learner autonomy. It also enables the integration of digital tools for sustainability education, aligning with the dual green and digital transition objectives.
5.4. Online and mobile Learning tools	• Online and mobile learning tools are used to support interactive and accessible learning. These include learning management systems (LMS), mobile applications, digital flashcards, online quizzes, and collaborative

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	platforms. • Such tools facilitate continuous learning beyond the classroom, enable quick knowledge checks, and support communication between learners and teachers. They also enhance digital competences while reinforcing environmental content.
5.5. Real case studies	• Real case studies from VET institutions, enterprises, and green industries are used to connect theory with practice. Learners analyze actual examples of waste management systems, energy-efficient technologies, or circular economy practices. • This methodology encourages critical thinking and problem-solving by exposing learners to real-life challenges and decision-making processes. It also helps learners understand the practical relevance of green practices in vocational occupations.
5.6. Visits to companies in the sector	• Educational visits to companies and organizations operating in green sectors are integrated into the unit. These visits allow learners to observe green practices, technologies, and management systems in real working environments. • Company visits strengthen links between VET and the labor market, provide insights into green jobs, and motivate learners by showcasing practical applications of sustainability concepts.
5.7. Workshops and experiential learning	• Workshops and experiential learning activities enable learners to actively engage in hands-on tasks, simulations, and practical exercises. Examples include waste sorting exercises, energy audits, or small-scale eco-innovation projects. • Through experiential learning, learners acquire practical skills and deepen their understanding by learning through doing. This methodology enhances retention of knowledge and supports the development of professional competences.

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5.8. Community based and participatory approaches	• Community-based and participatory approaches involve learners in local sustainability initiatives, community projects, and awareness-raising activities. Learners collaborate with local stakeholders, municipalities, NGOs, or enterprises. • This methodology fosters social responsibility, civic engagement, and a sense of ownership over environmental issues. It also reinforces the role of VET institutions as active contributors to sustainable community development.

7. Resources

The following resources support teaching, learning, and assessment activities in the unit. They combine policy documents, educational materials, digital tools, and real-world resources relevant to green practices in VET.

7.1. Policy and Strategic Documents

- European Green Deal policy documents and action plans
- EU Circular Economy Action Plan
- United Nations Sustainable Development Goals (SDGs)
- National environmental and VET strategies of Kosovo and Albania
- EU Skills Agenda and Green Skills policy frameworks

These resources provide the policy context and strategic direction for integrating sustainability into vocational education and training.

7.2. Teaching and Learning Materials

- VET curricula and training standards related to environmental protection and sustainability
- Manuals and handbooks on green practices, waste management, and energy efficiency
- Case study collections on sustainable enterprises and green technologies
- Teacher guides for sustainability and environmental education

These materials support lesson planning, classroom instruction, and learner engagement.

7.3. Digital and Online Learning Resources

- Learning Management Systems (LMS) for course delivery and collaboration

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- Online platforms for digital flashcards, quizzes, and interactive learning
- Educational videos and multimedia content on green technologies and practices
- Open Educational Resources (OER) related to sustainability and VET

Digital resources enhance blended and online learning and support learner autonomy.

7.4. Tools for Practical and Project-Based Learning

- Waste separation and recycling equipment (bins, labels, measuring tools)
- Energy monitoring tools and basic audit checklists
- Templates for project work, action plans, and sustainability assessments
- Simulation tools and virtual labs related to green technologies

These tools enable hands-on learning and real-world application of green practices.

7.5. Industry and Community Resources

- Partner companies and enterprises in green sectors
- Local municipalities and environmental agencies
- NGOs and community organizations working on sustainability
- Chambers of commerce and professional associations

Collaboration with external stakeholders strengthens work-based learning and community engagement.

7.6. Assessment and Evaluation Resources

- Rubrics for project-based and collaborative learning
- Self-assessment and peer-assessment tools
- Reflection journals and learning portfolios
- Monitoring indicators for green practices in VET institutions

These resources support fair, transparent, and competence-based assessment.

7.7. Infrastructure and Facilities

- VET workshops and laboratories adapted for green practices
- Renewable energy installations (where available)
- Recycling points and eco-corners within institutions
- IT infrastructure for blended and online learning

Appropriate infrastructure enhances experiential learning and institutional sustainability.

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8. Assessment criteria

Include the assessment criteria for this unit:

8.1. Use of digital tools *(sample for possible tools to be used)*
Assessment focus:
Learners' ability to effectively use digital and mobile tools to support learning, collaboration, research, and presentation of green practices.
Sample tools:

- Learning Management Systems (LMS) for content access and task submission
- Online collaboration tools for group work and joint projects
- Digital flashcards and quiz tools for knowledge checks
- Presentation and visualization tools for project reporting

Assessment criteria:

- Appropriate selection and correct use of digital tools
- Active participation in online and blended learning activities
- Quality and clarity of digital content produced
- Respect for digital ethics and responsible use of technology

8.2. Understanding the sustainability framework
Assessment focus:
Learners' understanding of sustainability concepts, environmental policies, and green practices relevant to VET.
Assessment criteria:

- Correct explanation of key sustainability concepts and principles
- Understanding of circular economy, waste management, and energy efficiency
- Awareness of EU and national sustainability frameworks
- Ability to relate sustainability principles to vocational sectors

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8.3. Ability to implement real improvements

Assessment focus:

Learners' capacity to identify environmental challenges and propose realistic, measurable improvements within a VET institution or workplace.

Assessment criteria:

- Identification of relevant environmental issues
- Feasibility and practicality of proposed solutions
- Consideration of environmental, economic, and social impacts
- Teamwork and problem-solving skills during implementation

8.4. Final Product: waste management plan for your VET institution

Assessment focus:

Development of a comprehensive waste management plan as a final project.

Assessment criteria:

- Clear structure and objectives of the waste management plan
- Accurate analysis of waste types and current practices
- Proposed waste reduction, separation, and recycling measures
- Alignment with sustainability principles and regulatory requirements
- Quality of written documentation and oral presentation

The final product demonstrates the learner's ability to integrate knowledge, skills, and competences acquired throughout the unit.

8.5. Self- and co-assessment

Assessment focus:

Learners' reflection on their own learning process and contribution to group work, as well as peer evaluation.

Assessment criteria:

- Honest and constructive self-reflection on learning outcomes
- Ability to assess peers' contributions respectfully and objectively
- Identification of strengths, challenges, and areas for improvement

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- Active engagement in feedback and continuous improvement processes

Assessment Methods Used

- Continuous assessment (participation, tasks, digital activities)
- Project-based assessment (final waste management plan)
- Self- and peer-assessment tools
- Teacher observation and feedback

9. Inclusion of the EU/transnational perspective

The unit **"Understanding Green Practices in VET"** integrates a strong European and transnational dimension by comparing sustainability practices in **Albania, Kosovo, and EU Member States**, and by supporting the gradual adaptation of **European environmental and VET standards** to the local context of the Western Balkans.

9.1. Comparative Perspective: Albania, Kosovo, and the EU

Across the EU, green practices in VET are embedded within comprehensive policy frameworks such as the **European Green Deal**, the **Circular Economy Action Plan**, and the **EU Skills Agenda**. These frameworks ensure systematic integration of sustainability into curricula, institutional management, and work-based learning.

In **Albania and Kosovo**, green practices in VET are increasingly recognized as a strategic priority, but their implementation remains uneven. While policy alignment with EU standards is progressing, practical application at institutional level often faces challenges related to infrastructure, funding, teacher training, and industry cooperation.

This unit encourages learners to critically compare:

- The level of institutionalization of green practices
- Availability of green technologies and infrastructure
- Integration of sustainability into VET curricula
- Links between VET institutions and green labor markets

9.2. Adaptation of European Standards to the Local Context

European standards and guidelines serve as a reference point rather than a one-size-fits-all model. The unit emphasizes **context-sensitive adaptation**, taking into account the economic, institutional, and social realities of Albania and Kosovo.

Learners explore how EU standards on:

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- Waste management
- Energy efficiency
- Environmental management systems
- Occupational and environmental safety

can be **progressively adapted** to local VET institutions through realistic, scalable, and cost-effective measures.

9.3. Transnational Learning and Knowledge Exchange

The unit promotes transnational learning through collaboration between VET institutions in Albania, Kosovo, and EU partner countries. Joint projects, virtual exchanges, and comparative case studies enable learners and teachers to share experiences and best practices.
This transnational approach:

- Enhances understanding of European diversity in sustainability practices
- Strengthens regional cooperation and mutual learning
- Encourages transfer of innovation and good practices

9.4. Contribution to European Integration and Policy Alignment

By integrating EU-level concepts, terminology, and practices, the unit supports the broader process of **European integration** of Albania and Kosovo. Learners become familiar with European approaches to sustainability, quality assurance, and skills development.
The unit contributes to:

- Harmonization of VET practices with EU priorities
- Development of green competences aligned with European labor market needs
- Preparation of learners for mobility, employability, and lifelong learning

9.5. Added Value for Learners and Institutions

The inclusion of the EU and transnational perspective adds clear value by:

- Broadening learners' understanding beyond national contexts
- Enhancing employability in regional and European labor markets
- Strengthening institutional capacity for innovation and reform
- Supporting evidence-based policy development in green VET

Concluding Note

Through comparison, adaptation, and cooperation, the unit positions **green practices in VET** as a shared European objective while respecting local realities. This balanced approach ensures relevance, feasibility, and sustainability of reforms in Albania and Kosovo.

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8.3 Learning Pathway 2 – Seasoned VET Trainers

Module 5 – Technological Innovations in Waste Management

1. Overview of the Unit

1.1. Unit information

Unit title	Technological Innovations in Waste Management – Case Study from the Circular Economy Park by RecycAl
This unit is part of…	Module 5 – Technological Innovations in Waste Management
Prerequisites (if any)	**N/A – Recommended but not mandatory:** Learners with basic knowledge of waste management systems and circular economy concepts will benefit more from this module.

1.2. Justification and objectives of the Teaching Unit

This unit presents a real-life case study from Albania's first Circular Economy Park, developed and operated by RecycAl sh.p.k. It explores practical and innovative solutions in waste management, focusing on the implementation of low-cost, context-adapted technologies across five core areas: glass recycling, plastic preparation, second-hand and repair, eco-construction with sustainable materials, and circular education.

Learners will gain insight into how technological innovations, many developed with limited resources, can be applied effectively in low- and middle-income contexts. The unit highlights how a startup-driven approach can combine recycling infrastructure with education, inclusion, and entrepreneurship.

By the end of this unit, learners will be able to:

- Understand the integration of multiple recycling and reuse technologies in a unified facility.
- Analyse the practical challenges and solutions in implementing small-scale waste treatment technologies.
- Evaluate how technological choices align with social, economic, and environmental goals.
- Use the Circular Economy Park as a replicable model for community-level innovation.

Estimated duration: 4–6 learning hours (flexible based on learner engagement with videos, site photos, and optional assignments).

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1.3. Contextualization of the issue in the country (Albania or Kosovo)

Albania continues to face major challenges in municipal solid waste management. According to INSTAT (2024), the total amount of waste collected and managed nationwide in 2023 was **862,241 tons**, with an average of **360 kg of waste generated per inhabitant**. Despite the National Waste Management Plan (2020–2035), progress toward recycling targets remains limited.

In 2023, only **18.81%** of urban waste was recycled, while **76.49%** was disposed of in landfills or temporary storage sites, and **4.55%** was incinerated. Most municipalities lack efficient infrastructure for source separation, and innovative waste treatment technologies are rarely implemented. Many recycling and processing systems remain donor-dependent, fragmented, or outdated.

In this context, **RecycAl's Circular Economy Park in Fushë-Krujë** stands out as a national example of bottom-up innovation in the Albanian waste sector. As the first integrated park of its kind in the country, it introduces **modular, scalable, and context-specific technologies** that directly address the country's waste-related bottlenecks. The park includes:

- A **glass recycling line** converting waste glass into pool filter media and terrazzo aggregate via **zero-waste, no-water processes**;
- A **plastic preparation area** for **collecting, sorting, and pressing** recyclable plastics for further treatment by partner facilities;
- A **second-hand and repair station** for reuse;
- An **eco-education center** built from straw, earth, and wood;
- A **training and demonstration space** used to educate municipal staff, students, and circular entrepreneurs.

This module uses the Circular Economy Park as a real-life case study to showcase how **technological innovation tailored to Albania's realities** can drive change in waste management, bridge policy gaps, and inspire practical solutions across the Western Balkans.

1.3. Expected results in terms of teaching practices

Through this teaching unit, instructors will be equipped to:

- **Use a real-life case study** (Circular Economy Park – RecycAl) to teach technological innovation in waste management;
- **Demonstrate how context-adapted, small-to-medium scale technologies** (e.g., glass recycling, plastic preparation, reuse infrastructure) can be implemented in low-resource settings;
- **Facilitate hands-on, problem-solving discussions** around designing, operating, and replicating modular recycling solutions;
- **Connect national waste management challenges with applied technical responses**, enabling learners to evaluate, adapt, or transfer technologies;
- Integrate **interactive teaching methods** (e.g., site visits, videos, material flow diagrams) to enhance engagement and comprehension.

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1.4. Connection with the objectives of the WARP Project

This unit directly contributes to the core objectives of the WARP Project by:

- **Bridging the gap between theoretical knowledge and practical application** of circular economy principles through a real-world case study from the Circular Economy Park in Albania;
- **Enhancing VET trainers' capacity** to deliver education on **technological innovations** that enable sustainable plastic and waste management solutions;
- **Promoting digital and green skills development** by showcasing modular, replicable technologies (e.g., glass recycling, plastic sorting) adapted to local realities in the Western Balkans;
- Supporting the **integration of circular economy solutions into formal training curricula**, thus strengthening systemic change across vocational education institutions;
- Contributing to a **regional knowledge base** by offering a transferable and scalable teaching model grounded in hands-on experience and local innovation.

2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	This unit develops learners' ability to understand and apply ecological principles in waste management. The focus is on **low-impact, context-appropriate technologies** that reduce landfill dependence, promote material recovery, and close resource loops. Learners will gain insight into **real-world applications** of circular economy strategies through the case of the Circular Economy Park in Albania, exploring how ecological design and technological innovation can coexist in practical waste solutions.
Description of the Learning Outcomes related to this competence	By the end of this unit, learners will be able to: • Identify ecological challenges linked to traditional waste management systems in Albania and the Western Balkans; • Explain how circular economy principles can be embedded into technological solutions for waste reduction; • Evaluate different low-impact technologies used in the Circular Economy Park, such

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	as glass recycling and reuse systems; • Propose context-appropriate ecological interventions for local waste management issues based on real-life examples.
Description of the evaluation criteria	The acquisition of the ecological competencies and related learning outcomes will be verified through: • **Practical assignments**: Learners will complete a case-based analysis of a selected waste stream, proposing ecological improvements based on the technologies seen in the Circular Economy Park. • **Participation in discussions**: Active engagement during training sessions, especially in reflecting on environmental impacts of current vs. innovative practices. • **Short quizzes or reflection logs**: To assess understanding of ecological principles and specific circular solutions. • **Final project or proposal**: Learners will draft a short concept note applying ecological design thinking to their local waste challenges, demonstrating the integration of learning outcomes.

2.2. Digital competencies

Description of the competence	Learners are introduced to basic digital tools in waste management. While RecycAl currently uses mainly manual systems (e.g. physical weighing slips, written logs), NTUA will support with examples of smart tools such as digital waste tracking, data platforms, and e-learning methods.
Description of the Learning Outcomes related to this competence	• Understand how digital tools can support recycling operations. • Recognize simple data-entry and tracking systems. • Use NTUA's digital learning environment to access resources and exercises.
Description of the evaluation criteria	• Complete short tasks using sample digital tools or templates. • Participate in quizzes or assignments via NTUA's platform. • Group discussion or analysis of a case using basic digital data.

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2.3. Pedagogical competencies

Description of the competence	Learners will develop the ability to translate complex technological waste-management solutions into accessible and engaging training formats. They will be able to design, structure, and deliver effective learning sessions that communicate the principles and applications of technological innovations in waste management.
Description of the Learning Outcomes related to this competence	- Learners are able to explain a technological innovation in simple terms to a non-technical audience. - Learners are able to design a training session outline based on a specific waste-management technology. - Learners demonstrate the ability to link real-world cases (e.g. Circular Economy Park) with theoretical concepts in an engaging way.
Description of the evaluation criteria	- Evaluation based on a short training outline or mock session prepared by learners. - Assessment of communication clarity and didactic structure. - Peer or mentor feedback on content accessibility and structure

3. Learning outcomes

By the end of this course, students should be able to:

	Knowledge	**Skills**	**Competences**
LO1	Understand the role of technological innovation in improving municipal and industrial waste management systems	Identify and describe key technologies used in a Circular Economy Park, such as glass recycling or plastic pressing	Apply practical knowledge to assess the suitability of low-cost and modular waste technologies for specific contexts
LO2	Know the steps of the glass recycling process implemented at RecycAl	Operate, explain, and simulate core steps of glass transformation into final products (e.g., pool filter media)	Evaluate process efficiency and environmental benefits of circular approaches to glass waste
LO3	Understand the principles behind zero-waste infrastructure (e.g. eco-	Explain how eco-materials can be used for educational and operational	Integrate sustainability and education

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	construction)	spaces in the waste sector	in planning small-scale circular infrastructure
LO4	Recognize challenges in adopting waste technologies in Albania and the Western Balkans	Analyze barriers such as funding, infrastructure gaps, or public awareness	Propose feasible technology-based solutions adapted to local waste management realities

4. Teaching contents of the Unit *(the following are proposals for the content of the unit)*

Module 1: Write here the title of your module.			
Module number & title	**Content type**	**Content development**	**Notes**
1.*****	Paragraph/Heading	Circular Economy technologies in waste treatment	
1.1.	Paragraph/Subheading	This section introduces learners to low-cost, modular, and sustainable technologies applied in real-life conditions. Using the Circular Economy Park in Albania as a case study, learners explore innovations in glass recycling, plastic sorting and pressing, and eco-construction. The pedagogical approach blends field experience with theory, supported by NTUA where needed.	
	Note	Technologies are explained through real-life examples and simplified schematics.	
	Columns	**Glass** **Waste** At RecycAl's Circular Economy Park, glass is fully processed on-site using a semi-automated line. Glass Waste are broken, manually sorted, crushed, sieved, and turned into valuable products such as pool filtration media and terrazzo aggregates.	

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<table>
<tr><td></td><td></td><td>Plastic Waste
Recyclable plastic waste is collected from selected clients, cleaned, separated by type, and compacted into bales. These bales are then sold to licensed recycling companies in Albania and the region. The process ensures high-quality material recovery and compliance with local legislation.</td><td>  </td></tr>
<tr><td></td><td></td><td>Second-hand Products
The Park operates a second-hand shop where used items—such as clothes, furniture, and household goods—are collected, sometimes cleaned or repaired, and offered at affordable prices. This promotes reuse, reduces waste, and supports low-income families and circular lifestyles.</td><td>  </td></tr>
<tr><td></td><td>Table</td><td>
<table>
<tr><td>Glass Waste</td><td>Plastic Waste</td><td>Second-hand Products</td></tr>
<tr><td>Collection → Breaking → Manual sorting → Crushing → Drying → Sieving → Clean product</td><td>Collection → Cleaning → Separation by type → Compaction (baling) → Sale to recyclers</td><td>Collection → Cleaning/Repair (if needed) – Display and sale in the second-hand shop</td></tr>
<tr><td>Pool filtration media and terrazzo aggregate (clean, value-added, zero-waste, dry process</td><td>Baled recyclable plastic sold to licensed recycling companies (high material recovery, legal compliance</td><td>Extended lifespan of usable products, affordable access for low-income families, waste prevention through reuse</td></tr>
</table>
</td><td></td></tr>
<tr><td></td><td>Divider</td><td colspan="2">By default, dividers are labeled as CONTINUE, but you can customize this label as needed.</td></tr>
<tr><td>2.</td><td>Statement</td><td colspan="2">Our Circular Economy Park introduces real-world solutions to complex waste challenges. Through practical demonstrations, we help trainees and visitors understand material flows and innovative recycling techniques.</td></tr>
</table>

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3.	List	• Eco-construction with straw and natural materials • Innovative glass recycling with 0 waste and no water use • Plastic recycling	Use a bulleted list
4.	Chart	• **Second-hand products = 40%** (Reuse of furniture, clothing, electronics, household goods, etc.) • **Glass = 30%** (Collected, washed, thermally treated, and processed into new materials) • **Plastics = 20%** (Sorted, compacted, and baled for further recycling) • **Metals & Others = 10%** (Small-scale collection and sale of non-hazardous metals, jars, and mixed minor fractions)	Use a line chart
5. Image	Image	· Glass collected at RecycAl sorting center.	· Glass recycling process (e.g. crushed glass, sorting line, etc.) (filename.jpg)
5. Image	Image	· Students visiting the Eco-Education Center.	

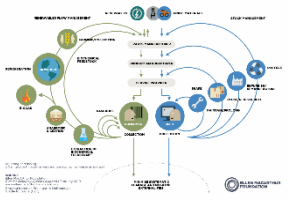
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5. Image	Image	· Pressing machine for recyclable plastics.	
5. Image	Image	· Second-hand items sorted for resale.	
5. Image	Image	· Baled plastic bottles ready for transport.	
6. Video & audio	Video	Add the video transcription here or add a link to a document. This text will be used to add captions to the video.	Add video file (filename.mp4)
6. Video & audio	Video	Provide video link	Embed video link
6. Video & audio	Audio	Add the video transcription here or add a link to a document. This text will be used to add captions to the video.	Add audio file (filename.mp3)
7. Files	File	Add any additional text, such as descriptions or instructions, to accompany the file. ➤ *This file contains the business plan for glass recycling at Circular Economy*	Add file here (filename.pdf)

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		Park.	AGR_Presentation.pptx
8. Accordion and tabs	Accordion	What is Circular Economy? Circular economy is an economic system aimed at eliminating waste and the continual use of resources through reuse, sharing, repair, recycling, and re-design.	
	Accordion	Key Technologies Used" *"The Circular Economy Park uses a glass crushing system, plastic shredders, composters, and thermal treatment for glass. Each machine reduces waste and transforms it into new resources*	Glass Recycling Line.mp4
8. Accordion and tabs	Tab	Glass Recycling Process Collected glass is cleaned, sorted, thermally treated, crushed, and turned into fine granules. These are used for pool filters or terrazzo tiles."	Preparation for crushing.mp4
	Tab		
9. Labeled graphic	Labeled graphic	Upload image of a *glass crushing machine* This machine crushes cleaned glass into fine granules for reuse.	Glass-recycling-equipment-Glass-recycling-
		Upload an *infographic about circular economy cycle* This shows how materials flow in a circular system	

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		Marker 3: Add audio **Description:** Here you can add more information, even as an audio clip.	Add audio (file-name.mp3)
		This is our eco-education center built with straw bales and reused wood. It hosts workshops for schools and VET trainings	
10.Scenario	Scenario	**Slide 1** **1.Suggest a character and background** A young environmental inspector visiting the Circular Economy Park for the first time. **2.Write instructions** Guide the inspector through key learning stations. At each stop, choose the correct answer to proceed.	
		Slide 2 **Write your scenario**. *You arrive at the glass crusher. What safety rule must be followed?* **Answer A:** Wear gloves and goggles ✅ **Answer B:** Touch glass with bare hands ❌ **Answer C:** Ignore the operator ❌	
		Slide 3 **Write a closing text** Well done! You've completed your inspection. You've learned how circular technologies are making a real impact. Share what inspired you the most**.**	
11.Timeline	Timeline	Date 1: 2023 Start of construction: Foundations of the Eco-Education Center were laid in April 2023 using local straw and clay	

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		Date 2: 2024 First batch of pool filter material made from recycled glass was sold to clients in 2024.	
12.Flashcards	Flashcards	**Flashcard 1** **Front:** e.g. photo of glass recycling **Back:** e.g. "This is how glass is sorted before crushing.	
		Flashcard 2 **Front:** e.g. plastic types **Back:** e.g. "Different types of plastics must be separated before recycling."	
		Flashcard 3 **Front:** What are 3 steps of eco construction? **Back:** 	
13. Multiple choice and multiple re-sponse	Multiple choice	**Question 1** What is the main purpose of glass crushing in recycling? **Answer 1** To make the glass more colorful. **Feedback:** Incorrect. The color is not relevant to the crushing process. **Answer 2** To reduce its volume and prepare it for new products **Feedback:** Correct. This is the main purpose.	To reduce its volume and prepare it for new products
13. Multiple choice and	Multiple answer	**Question 1** Which of the following are recyclable materials in our process?	We recycle glass into filtration media and

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multiple response		**Answer 1** Glass **Feedback:** Correct. We recycle glass into filtration media and tiles. **Answer 2** Organic Waste **Feedback:** Incorrect. We currently do not process organic waste.	tiles.
14. Matching and fill in the blank	Matching	PET bottle → Plastic recycling Crushed glass → Filter media Reused furniture → Second-hand market	
14. Matching and fill in the blank	Fill in the blank	We turn old _____ into useful home products The crushed glass is then used as _____ material.	Furniture Filtration

5 Activities (examples)

Module 1: Eco-Construction & Circular Use of Materials in Waste Management			
Module number & title	**Activity type**	**Activity development**	**Notes**
Flashcards	Flashcards	**Flashcard 1** **Front:** ![Image: Straw Bale House Wall Detail] **Back:** Straw bale construction uses natural materials like straw and clay. It provides great insulation, is low-cost, and environmentally friendly.	

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Flashcards	Flashcards	**Flashcard 2** **Front:** ![Image: Glass Recycling Process] **Back:** Recycled glass can be used in eco-construction (e.g. pool filters, terrazzo panels). It's 100% recyclable and reduces energy use. *Add image: glass_recycling.jpg*	
Flashcards	Flashcards	**Flashcard 3** **Front:** What is eco-construction? **Back:** Eco-construction refers to the design and construction of buildings using environmentally friendly materials, techniques, and technologies. *Add image: eco_construction_concept.jpg*	
Multiple choice and multiple response	Multiple choice	**Question 1** Which of the following materials can be used in eco-construction? • 🟢 A. Straw bales • 🟢 B. Recycled glass • 🔴 C. Single-use plastic packaging • 🟢 D. Timber off-cuts **Answer 1** **Feedback:** Options A, B, and D are suitable materials commonly used in eco-construction.	Options A, B, and D are suitable materials commonly used in eco-construction.
Multiple choice and multiple response	Multiple answer	Which benefits are associated with eco-construction? **Answer 2** • 🟢 A. Energy savings • 🟢 B. Lower carbon emissions • 🔴 C. Increased waste generation	Energy savings, reduced emissions, and use of local resources are key

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		• 🟢 D. Use of local materials **Feedback:** Energy savings, reduced emissions, and use of local resources are key eco-construction benefits.	eco-construction benefits.
Matching and fill in the blank	Matching	Match the material with its source or usage: • Straw bale → Agricultural residue • Recycled glass → Pool filters or tiles • Timber off-cuts → Furniture or insulation	
Matching and fill in the blank	Fill in the blank	Eco-construction promotes the use of _____ and _____ materials to reduce environmental impact.	**natural**, **recycled**
Digital map	Digital map	Creation of a digital map of eco-construction sites or local recycling points in Albania. Include photos, GPS locations, and material types used (e.g. straw, glass, wood). Can be done using Google My Maps or ArcGIS.	
Design of a small waste-separation system within the institution		Design a simple 3-bin separation system at school or workplace for: 1. Organic waste (compostable) 2. Dry recyclables (plastics, paper, glass) 3. Non-recyclables Include signage, color coding, and awareness materials.	
Digital simulation		Create a simulation (e.g. video or digital tool) showing the **life cycle of a recycled glass bottle**, from waste collection → sorting → crushing → melting → product creation (e.g. glass tile or filter).	
Digital awareness	Videos, infographics	Produce a **digital awareness infographic or video** titled: **"What are the 3 steps of Eco-Construction?"** 1. Select sustainable/recycled materials 2. Apply eco-friendly building techniques 3. Ensure energy efficiency and circularity 📎 Use the infographic you created earlier or embed a student-made version.	
Hackathon	Hackathon	**Mini hackathon: "Build the Future with Waste"** Challenge students to design a small-scale eco-structure (e.g. bench, shade	

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		shelter, garden element) using recycled waste. Teams will present their idea, material list, and a prototype sketch or 3D model. Duration: 1 day.	

6. Methodology

5.1. Project-Based Learning (PBL) and collaborative Learning	Students will engage in project-based learning by designing and testing small-scale eco-construction prototypes using waste materials (e.g. plastic insulation boards, glass-based panels). They will work in teams to document, test, and reflect on innovations, applying circular economy principles collaboratively.
5.2. Collaborative learning between institutions in Albania and Kosovo	Joint activities such as the virtual hackathon, infographic development, and shared field visits will allow learners from Albania and Kosovo to co-create solutions and exchange perspectives on technological innovation in waste management. Examples include co-designed flashcards and shared case study analyses.
5.3. Blended Learning	This unit combines online tools (digital maps, simulations, quizzes) with in-person workshops and visits to recycling parks. Learners explore topics such as container lifecycles and eco-material applications both independently and with mentors.
5.4. Online and mobile Learning tools	Learners interact with flashcards, digital awareness videos, and matching games via mobile-friendly platforms. Tools like Canva, PowerPoint, or Genially can be used for infographics. A WhatsApp group or Moodle forum may also support asynchronous exchange.

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5.5. Real case studies	The Circular Economy Park in Albania and glass recycling innovation with Kosovo partners serve as real case studies. Learners analyze these initiatives, reflect on challenges, and extract lessons for replication. Supporting documents and photos are included in the learning unit
5.6. Visits to companies in the sector	Students are encouraged to visit local recycling or eco-construction companies (e.g. RecycAl, Kosovo Glass Recycling, or construction firms using sustainable materials). These visits support the digital mapping task and help visualize the innovation lifecycle.
5.7. Workshops and experiential learning	Hands-on workshops (e.g. building a small eco-panel or conducting insulation experiments) deepen understanding of materials and processes. Hackathons and field tasks promote critical thinking and teamwork in real-life situations.
5.8. Community based and participatory approaches	Activities such as interviews with community recyclers, awareness-raising in schools, or collaborative clean-up initiatives help learners understand the social side of innovation. Students present findings to peers and local stakeholders.

7. Resources

- **Website:** https://recyclingalbania.com (Case Study Source)
- **Video:** "3 Steps of Eco-Construction" (Infographic or AI-generated explainer)
- **Book/Guide:** "Circular Construction Toolkit" by EU Environment
- **Tool:** Canva / PowerPoint / AI-based floorplan apps
- **Article:** "Low-carbon construction in the Western Balkans – GIZ"

8. Assessment criteria

Include the assessment criteria for this unit:

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8.1. Use of digital tools *(*ability to create infographics, digital floor plans, or pitch slides*)*
8.2. Understanding the sustainability framework - clear articulation of CE and eco-construction principles
8.3. Ability to implement real improvements - practical feasibility of the prototype or campaign idea
8.4. Final Product: waste management plan for your VET institution - e.g. a digital plan, model, or communication tool for sustainable construction or material use
8.5. Self- and co-assessment - students review their work and peer contributions after the Hackathon

9. Inclusion of the EU/transnational perspective

This unit encourages students to **compare local eco-construction methods** (e.g., straw bales in Albania) with **EU practices and regulations** (e.g., energy efficiency standards, green procurement). Kosovo-Albania exchanges show regional alignment efforts, while **EU examples** (e.g., Passivhaus, urban greening, Horizon projects) serve as inspiration for adapting practices to local needs.

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Module 6 – Assessment Strategies for Environmental Education

1. Overview of the Unit

1.1. Unit information

Unit title	Assessment Strategies for Environmental Education
This unit is part of…	Standalone course Module #06
Prerequisites (if any)	N/A – designed for seasoned VET trainers
Unit designer	Maria S. Kasidoni

1.2. Justification and objectives of the Teaching Unit

This unit aims to strengthen the capacity of experienced VET trainers to design, implement, and evaluate effective assessment strategies in environmental education, with a focus on sustainable waste management and recycling. It addresses the need to assess not only knowledge but also practical skills, green behaviours, and attitudes, integrating digital tools and OER-based approaches.

Estimated duration: 6–8 hours

1.3. Contextualization of the issue in the country (Albania or Kosovo)

In Albania and Kosovo, VET systems are increasingly required to align with EU environmental standards and circular economy principles. However, assessment practices often remain knowledge-based and exam-oriented. This unit responds to the need for more authentic, competency-based assessment methods that reflect real workplace practices in waste management, recycling, and environmental protection, while supporting ongoing VET reforms and green transition priorities in both countries.

1.3. Expected results in terms of teaching practices

As a result of this unit, VET trainers will:

- Apply competency-based and authentic assessment strategies in environmental education
- Integrate formative assessment and feedback into daily teaching practice

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- Use digital tools to assess green skills and learning progress
- Improve the alignment between learning outcomes, teaching activities, and assessment methods

1.4. Connection with the objectives of the WARP Project

This unit directly supports the WARP project objectives by:

- Enhancing the quality of VET teaching and assessment in waste management and recycling
- Promoting green skills and sustainable practices
- Supporting digital transformation through innovative assessment tools
- Contributing to harmonisation with EU standards and lifelong learning approaches

2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	Ability to assess learners' understanding and application of environmental principles, sustainable waste management practices, and responsible behaviours.
Description of the Learning Outcomes related to this competence	Trainers are able to design assessment tasks that evaluate environmental knowledge, practical waste-related skills, and sustainability attitudes.
Description of the evaluation criteria	Assessment tools include real-world tasks, observation checklists, and scenario-based evaluations aligned with environmental outcomes.

2.2. Digital competencies

Description of the competence	Ability to use digital tools and OER platforms to design, deliver, and analyse assessments in environmental education.
Description of the Learning Outcomes related to this competence	Trainers are able to apply online quizzes, digital portfolios, simulations, and interactive assessment formats.

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Description of the evaluation criteria	Use of digital assessment tools and correct interpretation of assessment data.

2.3. Pedagogical competencies

Description of the competence	Ability to apply learner-centred, formative, and authentic assessment strategies in VET contexts.
Description of the Learning Outcomes related to this competence	Trainers can align assessment with learning outcomes and vocational tasks.
Description of the evaluation criteria	Assessment plans demonstrate constructive alignment and use of appropriate methods.

3. Learning outcomes

By the end of this course, students should be able to:

	Knowledge	**Skills**	**Competences**
LO1	Explain key types of assessment in environmental education	Select suitable assessment methods	Apply assessment strategies in VET contexts
LO2	Describe principles of authentic assessment	Design real-world assessment tasks	Evaluate environmental competences
LO3	Identify digital assessment tools	Use digital and OER-based assessments	Integrate digital assessment into teaching
....			

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4. Teaching contents of the Unit

Module 1: Assessment Strategies for Environmental Education			
Module number & title	**Content type**	**Content development**	**Notes**
1.1	Paragraph/Heading	Role of assessment in sustainability learning	
	Paragraph	Assessment in sustainability learning ensures learners develop not only knowledge but also practical skills and responsible environmental behaviour relevant to real workplace contexts.	
	Paragraph	In VET, traditional knowledge-based assessment is insufficient for environmental education and must be complemented by competence-based approaches.	
	Paragraph	Sustainability assessment focuses on the ability to apply green practices, follow environmental regulations, and make responsible decisions in professional settings.	
	Paragraph	Formative assessment supports learning for change by providing continuous feedback that helps learners improve sustainable practices over time.	
	Paragraph	Authentic assessment evaluates learners through real or simulated workplace tasks, such as waste sorting, recycling procedures, or environmental audits.	
	Paragraph	Digital assessment tools support sustainability learning through online quizzes, simulations, and portfolios that improve transparency and accessibility.	
	Paragraph	Assessment aligned with EU frameworks ensures quality, comparability, and recognition of sustainability competences across VET systems.	
1.2	Paragraph/Heading	Formative, summative, and authentic assessment	
	Paragraph	Formative assessment supports learning during the training process by providing continuous feedback that helps learners improve their understanding and	

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		performance.	
	Paragraph	In environmental education, formative assessment encourages reflection on sustainable behaviour and gradual improvement of green skills.	
	Paragraph	Examples include observation, peer feedback, short quizzes, and guided self-assessment linked to waste management tasks.	
	Paragraph	Summative assessment evaluates learning outcomes at the end of a unit or course and is used for certification and formal recognition.	
	Paragraph	In sustainability learning, summative assessment verifies whether learners meet required environmental standards and competence levels.	
	Paragraph	Typical summative tools include final projects, practical tests, and end-of-unit assessments aligned with learning outcomes.	
	Paragraph	Authentic assessment evaluates learners through real or simulated workplace tasks that reflect actual professional practice.	
	Paragraph	In environmental VET, authentic assessment may include waste audits, recycling process evaluation, or compliance checks.	
	Paragraph	This approach increases validity and relevance while strengthening links between training, labour market needs, and EU green policies.	
1.3	Paragraph/Heading	Assessment of knowledge, skills, and attitudes	
	Paragraph	Assessment in environmental education must address knowledge, practical skills, and attitudes to reflect full sustainability competence.	
	Paragraph	**Knowledge assessment** verifies understanding of environmental concepts, regulations, and waste management procedures.	
	Paragraph	It commonly uses quizzes, short tests, and digital assessments aligned with defined learning outcomes.	
	Paragraph	**Skills assessment** evaluates the ability to apply knowledge in real or simulated workplace situations.	

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	Paragraph	In waste management training, skills assessment includes observation of sorting, handling, and compliance tasks.	
	Paragraph	**Attitude assessment** focuses on learners' responsibility, awareness, and commitment to sustainable practices.	
	Paragraph	Attitudes are assessed through self-assessment, reflection, peer feedback, and behaviour observation over time.	
	Paragraph	Balanced assessment ensures valid evaluation of environmental competence and supports long-term behaviour change.	
1.4	Paragraph/Heading	Digital and OER-based assessment approaches	
	Paragraph	Assessment of Knowledge, Skills and Attitudes	
	Paragraph	Assessment in environmental education must address knowledge, practical skills, and attitudes to reflect full sustainability competence.	
	Paragraph	Knowledge assessment verifies understanding of environmental concepts, regulations, and waste management procedures.	
	Paragraph	It commonly uses quizzes, short tests, and digital assessments aligned with defined learning outcomes.	
	Paragraph	Skills assessment evaluates the ability to apply knowledge in real or simulated workplace situations.	
	Paragraph	In waste management training, skills assessment includes observation of sorting, handling, and compliance tasks.	
	Paragraph	Attitude assessment focuses on learners' responsibility, awareness, and commitment to sustainable practices.	
	Paragraph	Attitudes are assessed through self-assessment, reflection, peer feedback, and behaviour observation over time.	
	Paragraph	Balanced assessment ensures valid evaluation of environmental competence and supports long-term behaviour change.	

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5 Activities (examples)

Module 1: Assessment Strategies for Environmental Education			
Module number & title	**Activity type**	**Activity development**	**Notes**
Time	**Activity**	**Instructions**	**Reflection / Debrief**
0:00 – 0:05 (5 min)	Introduction	Briefly introduce the session objectives: understanding the role and types of assessment in sustainability teaching, and exploring digital/OER approaches.	Ask students to share one expectation or concern about assessment in sustainability.
0:05 – 0:15 (10 min)	Reflective Debate (Role of Assessment)	- Divide students into two groups. - Debate: "Assessment drives sustainability learning more than content delivery." - Each group prepares arguments for 3–4 minutes and presents.	Ask: How does assessment influence what students prioritize in sustainability learning? Encourage links to real-world sustainability skills.
0:15 – 0:25 (10 min)	Assessment Design Challenge (Formative, Summative, Authentic)	- Students work in pairs. - Design a mini-assessment plan for a sustainability project, including: formative, summative, and authentic assessments. - 2–3 students briefly present their plan.	Prompt discussion: Which type of assessment do you think has the greatest impact on learning sustainability? Why?
0:25 – 0:35 (10 min)	Triad Assessment Map (Knowledge, Skills, Attitudes)	- Students create a table or mind map linking learning outcomes to knowledge, skills, and attitudes. - For each dimension, suggest one assessment method.	Reflection question: Are some learning dimensions harder to assess? How can assessment methods be adapted for sustainability topics?

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0:35 – 0:50 (15 min)	Interactive Digital Quiz & Peer Review (Digital & OER-Based)	- Students select or create a short OER on a sustainability topic. - Create a short digital quiz - Test each other in small groups. Short Digital Quiz: Sustainability Assessment Topic: Assessment in Sustainability Education Format: 5 questions, mix of multiple choice and true/false Estimated time: 5–7 minutes Q1 – Multiple Choice Question: Which of the following best describes authentic assessment in sustainability teaching? A) A multiple-choice test on sustainability facts B) A project where students design a community recycling program C) A reflective journal entry on personal habits D) A timed online quiz Correct Answer: B Feedback: Authentic assessments involve real-world tasks that demonstrate practical application of sustainability knowledge and skills.	Discussion prompts: What are the benefits of digital/OER assessments? What challenges might teachers face using them?

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		Q2 – True/False Question: Formative assessments are primarily used to monitor student learning and provide feedback during the learning process. A) True B) False Correct Answer: A Feedback: Formative assessments help students improve continuously, rather than only measuring final achievement. Q3 – Multiple Choice Question: Which dimension of sustainability learning is best assessed through role-play or group simulations? A) Knowledge B) Skills C) Attitudes D) Memorization Correct Answer: B Feedback: Role-plays and simulations allow students	

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		to practice and demonstrate skills, such as collaboration or problem-solving. Q4 – Multiple Choice Question: What is a key advantage of using digital or OER-based assessments in sustainability education? A) They replace teacher-led instruction entirely B) They are always easier to grade than traditional methods C) They allow interactive, accessible, and often collaborative learning experiences D) They guarantee higher student grades Correct Answer: C Feedback: Digital and OER-based assessments enhance engagement, provide instant feedback, and leverage open-access resources for sustainability topics. Q5 – True/False Question: Summative assessments are used only at the end of a learning period to evaluate what students have achieved. A) True	

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		B) False Correct Answer: A Feedback: Summative assessments are designed to measure overall learning outcomes, typically at the end of a course or project.	
0:50 – 1:00 (10 min)	Wrap-Up & Reflection	- Whole-class reflection: key takeaways about assessment in sustainability teaching. - Option: students share one action they will apply in their teaching or learning practice.	Ask: How will you balance knowledge, skills, and attitudes in sustainability assessments?

6. Methodology

5.1Project-Based Learning (PBL)	Project-Based Learning is used in this unit to enable VET trainers to design and reflect on authentic assessment tasks related to environmental education. Trainers work on concrete outputs, such as assessment plans, rubrics, or evaluation tools for waste management and recycling activities. This methodology mirrors real professional practice and supports the development of higher-order thinking, problem-solving, and decision-making skills.
5.2. Blended and Digital Learning	Blended learning combines face-to-face interaction with online learning activities. In this unit, digital OERs, interactive quizzes, and online assessment tools complement in-person discussions and workshops. This approach allows trainers to engage in self-paced learning while also benefiting from peer exchange and collaborative reflection.
5.3. Real Case Studies from the Waste Management Sector	Real case studies from waste management and recycling contexts are used to ground assessment strategies in actual workplace situations. Trainers analyse real or simulated scenarios (e.g. waste sorting, compliance checks, recycling

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	processes) and identify appropriate assessment methods. This methodology strengthens the relevance and transferability of learning outcomes to real VET environments.
5.4. Workshops and Experiential Learning	Workshops and experiential learning activities allow trainers to actively test and refine assessment tools. Through role-play, peer review, and hands-on exercises, participants experience assessment both from the trainer and learner perspective. This methodology supports reflective practice, continuous improvement, and deeper understanding of assessment quality in environmental education.

7. Resources

- WARP OER platform
- EU waste management guidelines
- Digital assessment tools and LMS platforms
- Cedefop – *Assessment of learning outcomes in VET*
- European Commission – *European Qualifications Framework (EQF)*
- EQAVET – *European Quality Assurance Reference Framework for VET*
- European Commission – *GreenComp: European Sustainability Competence Framework*
- European Training Foundation – *Assessment practices in VET*
- **European Commission** – *Digital Education Action Plan (2021–2027)*
- **European Commission** – *European Framework for the Digital Competence of Educators (DigCompEdu)*
- **European Commission** – *Open Education and OER in Europe*
- **Cedefop** – *Digital, greener and more resilient VET*
- **European Training Foundation (ETF)** – *Digitalisation and assessment in VET*
- **Cedefop** – *Assessment of learning outcomes in vocational education and training*

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- **European Commission** – *European Qualifications Framework (EQF)*
- **EQAVET** – *European Quality Assurance Reference Framework for VET*
- **European Commission** – *GreenComp: The European Sustainability Competence Framework*
- **European Training Foundation (ETF)** – *Quality assurance and assessment in VET*

8. Assessment criteria

Include the assessment criteria for this unit:

- Appropriate use of digital tools
- Understanding of sustainability and assessment principles
- Ability to design authentic assessment tasks
- Self- and peer-assessment

9. Inclusion of the EU/transnational perspective

The unit compares assessment practices in Albania and Kosovo with EU approaches, promoting alignment with European VET standards, EQF principles, and best practices in competency-based and green skills assessment.

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Module 7 – Project-Based Learning in Waste Management

1. Overview of the Unit

1.1. Unit information

Unit title	Project-based Learning in Waste Management
This unit is part of…	Standalone course (or) Part of Module #
Prerequisites (if any)	N/A (or) Learners must complete Module #
Unit designer	Maria S. Kasidoni

1.2. Justification and objectives of the Teaching Unit

This unit introduces **Project-Based Learning (PBL)** as an innovative and practice-oriented pedagogical approach for teaching **waste management and recycling** in Vocational Education and Training (VET). Learners are actively engaged in the design, implementation, and evaluation of **real-life waste management projects** within their VET institutions or local communities.
The unit integrates **green practices**, **digital tools**, **collaborative learning**, and **real case studies** developed within the WARP project. Its objective is to enable VET trainers and learners to move beyond theoretical instruction by applying sustainability and circular economy principles through hands-on, problem-solving activities that respond to local environmental challenges.
Estimated duration: 20–30 learning hours

1.3. Contextualization of the issue in the country (Albania or Kosovo)

In **Albania and Kosovo**, waste management remains a critical environmental and socio-economic challenge. Both countries face limited waste separation at source, insufficient recycling infrastructure, high reliance on landfilling, and low levels of public awareness regarding sustainable waste practices. Plastic waste and unmanaged industrial or institutional waste streams are particularly problematic in urban areas and around educational facilities.
VET institutions in both countries are increasingly recognized as key actors in addressing these challenges by equipping learners with **practical green skills** aligned with labor market needs and EU environmental standards. Introducing **Project-Based Learning in waste management** allows learners to work on real, local problems—such as improving recycling systems in schools, mapping waste flows, or designing awareness campaigns—while building competencies directly relevant to employment and community development.

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1.3. Expected results in terms of teaching practices

As a result of this unit, VET trainers are expected to:

- Shift from teacher-centered instruction to **learner-centered and project-based approaches**
- Design and facilitate **interdisciplinary learning projects** linked to real waste management challenges
- Integrate **digital tools and OERs** into teaching practice
- Strengthen cooperation with **local authorities, companies, and community stakeholders**
- Apply **authentic assessment methods**, including project outputs, peer assessment, and reflection

Overall, the unit supports the modernization of teaching practices and the professional development of VET trainers in line with green and digital transition goals.

1.4. Connection with the objectives of the WARP Project

This unit directly supports the objectives of the **WARP project** by:

- Building **green and digital competencies** among VET trainers and learners
- Promoting **innovative pedagogical methodologies**, particularly Project-Based Learning
- Operationalizing WARP **case studies** by transforming them into practical learning scenarios
- Supporting **capacity building** through modular, adaptable, and openly licensed educational resources
- Encouraging **international cooperation and knowledge transfer** among VET institutions in Albania, Kosovo, and the EU

The unit acts as a pedagogical framework that enables the practical application and replication of WARP best practices in waste management and recycling.

2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	Understanding sustainable waste management principles, waste hierarchy, circular economy concepts, and the environmental impacts of waste and plastic pollution.

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Description of the Learning Outcomes related to this competence	Learners can analyze local waste streams, identify environmental impacts, and propose sustainable waste reduction and recycling solutions.
Description of the evaluation criteria	□ Quality and relevance of sustainability analysis in project work □ Correct application of waste hierarchy and circular economy principles □ Environmental justification of proposed solutions

2.2. Digital competencies

Description of the competence	Ability to use digital tools for research, collaboration, data collection, visualization, and awareness-raising related to waste management projects.
Description of the Learning Outcomes related to this competence	Learners can effectively use digital maps, simulations, collaborative platforms, and multimedia tools to support waste management initiatives.
Description of the evaluation criteria	□ Appropriate selection and use of digital tools □ Quality of digital outputs (maps, infographics, videos, simulations) □ Active participation in online collaboration spaces

2.3. Pedagogical competencies

Description of the competence	Capacity to design, implement, and assess Project-Based Learning activities in VET contexts.
Description of the Learning Outcomes related to this competence	Learners and trainers can structure PBL activities, facilitate teamwork, and apply formative and summative assessment methods.
Description of the evaluation criteria	□ Coherence and feasibility of project design □ Application of collaborative and reflective learning practices □ Peer and self-assessment outcomes

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3. Learning outcomes

By the end of this course, students should be able to:

	Knowledge	**Skills**	**Competences**
L01	Understand principles of sustainable waste management and recycling	Analyze waste-related problems in real contexts	Apply sustainability principles in practical projects
LO2	Understand Project-Based Learning methodology	Design and implement project-based activities	Work collaboratively and manage projects
LO3	Know relevant digital tools for waste management	Use digital tools for mapping, simulation, and communication	Integrate digital solutions into green initiatives
L04	Understand EU and local waste management frameworks	Compare practices across countries	Adapt European best practices to local contexts

4. Teaching contents of the Unit *(the following are proposals for the content of the unit)*

Module 7: Project-Based Learning in Waste Management.			
Module number & title	**Content type**	**Content development**	**Notes**
7.1	Paragraph/Heading	Introduction to project based learning	
	Paragraph	PBL overview Project-Based Learning is an advanced learner-centered methodology where learning outcomes are achieved through structured projects addressing real-world challenges.	
	Paragraph	Added value for VET PBL strengthens the link between training and labor market needs, enabling learners to apply technical knowledge in authentic professional contexts.	
	Paragraph	Core characteristics	

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		PBL integrates problem-solving, teamwork, learner autonomy, and outcome-oriented tasks, supported by continuous feedback and reflection.	
	Paragraph	Learner engagement Learners assume responsibility for planning, implementation, and evaluation, developing professional behaviors alongside technical skills.	
	Paragraph	Trainer's role Trainers facilitate learning by setting frameworks, mentoring teams, monitoring progress, and assessing competence through real project outputs.	
	Paragraph	PBL and green transition PBL enables the effective integration of sustainability and circular economy principles through applied projects in waste management.	
7.2	Paragraph/Heading	Waste management basics	
	Paragraph	Waste management overview Waste management covers the collection, treatment, recycling, and disposal of waste to reduce environmental impact and support sustainable development.	
	Paragraph	Waste hierarchy The waste hierarchy prioritizes prevention, reuse, recycling, recovery, and disposal, guiding decision-making toward more sustainable practices.	
	Paragraph	Plastic waste challenges Plastic waste poses major environmental risks due to low recycling rates, improper disposal, and long degradation times.	
	Paragraph	Circular economy link Circular economy principles aim to keep materials in use longer through recycling, reuse, and resource efficiency.	
	Paragraph	Local context in VET VET institutions generate diverse waste streams and offer real settings to apply sustainable waste management practices.	
	Paragraph	Role of VET professionals	

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		VET trainers prepare learners to apply waste management standards and sustainability practices in professional and institutional contexts.	
7.3	Paragraph/Heading	Case studies analysis	
	Paragraph	**Purpose of case studies** Case studies link theory with practice, allowing trainers and learners to analyze real waste management solutions and assess their transferability.	
	Paragraph	**European good practices** EU case studies illustrate effective recycling systems, community engagement, and policy-driven waste management improvements.	
	Paragraph	**Regional relevance** Regional case studies from Albania and Kosovo reflect local constraints and opportunities in waste management and VET.	
	Paragraph	**Analytical approach** Learners examine context, stakeholders, technologies, and outcomes to identify success factors and implementation gaps.	
	Paragraph	**Transferability to VET** Case studies are used to design project tasks adapted to VET institutions, workplaces, and local communities.	
	Paragraph	**Role in PBL** Case studies serve as starting points for project-based learning, inspiring applied solutions rather than direct replication.	
7.4	Paragraph/Heading	**Examine real-world examples to understand successful waste management practices and circular economy models.**	
	Paragraph	Milton Keynes, UK Paragraph/Subheading: Urban recycling excellence Paragraph: Milton Keynes achieves 65% recycling through community engagement, color-coded bins, and weekly collection programs.	
	Paragraph	Cyprus – Green Kiosk	

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		Paragraph/Subheading: Innovation in remote regions Paragraph: Green Kiosk network supports packaging waste recycling, showing how VET can train operators and improve community participation.	
	Paragraph	INCA Ltd. & AZ Group, Albania Paragraph/Subheading: Industrial circular economy Paragraph: Closed-loop industrial practices turn by-products into new materials, providing a platform for hands-on VET training in green skills.	
	Paragraph	RecycAl Circular Economy Park, Albania Paragraph/Subheading: Education-driven circular hub Paragraph: The Park trains students, engages communities, and integrates social inclusion while implementing recycling and upcycling projects.	
	Paragraph	Greening VET Campus, Pristina Paragraph/Subheading: School-level transformation Paragraph: Students implement a campus-wide recycling plan, reducing waste by 50% and embedding sustainability in learning.	
	Paragraph	Wood Waste Upcycling, Gjakova Paragraph/Subheading: Green entrepreneurship in carpentry Paragraph: Students design and produce furniture from wood waste, gaining circular economy and practical business skills.	
7.5	Paragraph/Heading	Digital tools	
		Role of digital tools Digital tools support data collection, analysis, collaboration, and communication in waste management and project-based learning.	
		Planning and collaboration Online platforms enable team coordination, task tracking, and documentation throughout project implementation.	
		Mapping and data tools Digital maps and spreadsheets help visualize waste flows, recycling points, and	

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		project results.	
		Simulations and modeling Digital simulations support understanding of product life cycles and environmental impacts.	
		Awareness and communication Multimedia tools allow learners to create videos and infographics for waste awareness campaigns.	
		Digital competence in VET Using digital tools strengthens learners' employability and supports the digital transition of VET.	

5 Activities (examples)

Module 07: Project-based Learning in Waste Management			
Module number & title	**Activity type**	**Activity development**	**Notes**
		Course Activities: Project-based Learning in Waste Management Activity 1: Local Waste Challenge Identification Type: Individual → Group Mode: Face-to-face / Online Description: Participants analyze their local or regional waste management challenges (with emphasis on plastic waste). Using a guided worksheet, they identify a real problem that could be addressed through a project-based learning (PBL) approach in VET. Key Actions: • Mapping local waste streams and stakeholders • Identifying environmental, social, and economic impacts	

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		• Selecting one priority challenge to address Outputs: • Problem statement (1–2 pages) • Short presentation or infographic Skills Developed: Green awareness, systems thinking, problem analysis	
		Activity 2: Designing a PBL Scenario for Waste Management Type: Group work Mode: Online collaborative workspace Description: Participants design a PBL scenario suitable for VET learners, based on the selected waste challenge. The scenario includes learning outcomes, tasks, roles, timeline, and expected deliverables. Key Actions: • Defining project goals aligned with green and digital competencies • Identifying learner roles (e.g. waste auditor, recycling technician, digital communicator) • Integrating sustainability and circular economy principles Outputs: • PBL scenario template • Learning outcomes mapped to EQF/ESCO (where applicable) Skills Developed: Instructional design, pedagogical innovation, sustainability integration	
		Activity 3: Digital Tools for Project-based Waste Management Type: Hands-on workshop Mode: Online / Blended Description:	

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		Participants explore and apply digital tools that support PBL in waste management, such as data collection apps, collaborative platforms, and basic visualization tools. Key Actions: • Using digital tools to monitor waste flows • Collaborative documentation and reporting • Introduction to simple digital dashboards or spreadsheets Outputs: • Digital project workspace • Sample data visualization or report Skills Developed: Digital literacy, data handling, collaborative work	
		Activity 4: Industry & Community Engagement Simulation Type: Role-play / Simulation Mode: Face-to-face / Online Description: Participants simulate collaboration with industry, municipalities, or recycling companies. They practice aligning VET projects with real market and community needs. Key Actions: • Stakeholder mapping • Simulated meetings and negotiations • Defining project constraints and expectations Outputs: • Stakeholder engagement plan • Reflection notes Skills Developed: Communication, stakeholder engagement, industry relevance	

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		Activity 5: Implementation Planning of the PBL Project Type: Group planning activity Mode: Online Description: Participants develop an implementation plan for running the waste management PBL project with VET learners, including assessment methods and risk management. Key Actions: • Defining project phases and milestones • Planning learner assessment (formative & summative) • Identifying safety, environmental, and ethical considerations Outputs: • Project implementation plan • Assessment rubric Skills Developed: Project management, evaluation design, risk awareness	
		Activity 6: Monitoring, Reflection, and Iteration Type: Reflective learning Mode: Individual / Group Description: Participants reflect on the learning process and outcomes, focusing on how PBL enhances learner engagement and sustainability competences in waste management. Key Actions: • Peer feedback exchange • Self-assessment using reflection prompts • Identifying improvements and scalability options	

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		Outputs: • Reflective journal entry • Revised PBL scenario Skills Developed: Critical thinking, continuous improvement, reflective practice	
		Activity 7: Localization and Adaptation of OERs Type: Practical adaptation task Mode: Online Description: Participants adapt provided OER materials to their local context (language, regulations, waste systems), ensuring accessibility and reuse. Key Actions: • Translating or contextualizing content • Adjusting examples to local waste practices • Applying open licenses correctly Outputs: • Localized OER module • Licensing and attribution checklist Skills Developed: OER literacy, inclusiveness, localization skills	
		Activity 8: Community of Practice Sharing Session Type: Collaborative exchange Mode: Online (Virtual Collaboration and Training Space) Description: Participants present their PBL projects and share lessons learned with peers from partner countries. Key Actions:	

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		• Cross-country knowledge exchange • Peer mentoring and feedback • Identification of future collaboration opportunities Outputs: • Project presentation • Contribution to Community of Practice repository Skills Developed: International cooperation, peer learning, professional networking	

6. Methodology

6.1. Project-Based Learning (PBL) and collaborative learning	Learners work in teams on real waste management challenges, following structured project phases.
6.2. Collaborative learning between institutions in Albania and Kosovo	Exchange of project ideas, peer feedback, and joint online activities.
6.3. Blended Learning	Combination of face-to-face workshops and online learning via the WARP Virtual Learning Environment.
6.4. Online and mobile Learning tools	Use of LMS platforms, collaborative documents, mobile data collection apps.
6.5. Real case studies	Use of WARP case studies as the basis for analysis and project design.
6.6. Visits to companies in the sector	Physical or virtual visits to recycling companies and waste management facilities.
6.7. Workshops and experiential learning	Hands-on sessions focused on design thinking, prototyping, and reflection.
6.8. Community based and participatory approaches	Engagement with local communities, municipalities, and NGOs.

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7. Resources

- ☐ WARP case studies and OERs
- ☐ EU waste and circular economy directives
- ☐ National waste management strategies (Albania / Kosovo)
- ☐ Digital mapping and simulation tools
- ☐ Videos, infographics, and interactive materials

8. Assessment criteria

Include the assessment criteria for this unit:

- ☐ 8.1. Use of digital tools: Effectiveness and appropriateness
- ☐ 8.2. Understanding the sustainability framework: Correct application of concepts
- ☐ 8.3. Ability to implement real improvements: Practical feasibility and impact
- ☐ 8.4. Final product: Waste management plan for the VET institution
- ☐ 8.5. Self- and co-assessment: Reflection and peer feedback

9. Inclusion of the EU/transnational perspective

The unit compares waste management practices in **Albania, Kosovo, and EU countries**, using WARP case studies to highlight differences in infrastructure, policy implementation, and public engagement. Learners explore how **European standards and best practices** can be adapted to local conditions, contributing to alignment with EU environmental objectives and supporting regional cooperation and knowledge transfer.

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Module 8 – Work-Based Learning in Waste Management

1. Overview of the Unit

1.1. Unit information

Unit title	Work-Based Learning in Waste Management
This unit is part of…	Module 8 – Work-Based Learning in Waste Management
Prerequisites (if any)	Completion of Modules 1–7 recommended for best understanding

1.2. Justification and objectives of the Teaching Unit

This unit empowers learners with practical knowledge and hands-on experience in waste management through direct interaction with industry practices. Hosted by Albania's first Circular Economy Park (RecycAl), the unit bridges theory and the workplace, enhancing digital, green, and entrepreneurial skills. Duration: 10–15 hours

1.3. Contextualization of the issue in the country (Albania or Kosovo)

In Albania, the waste management sector is evolving with growing emphasis on circular practices. However, there is a major gap in practical learning opportunities. RecycAl's pioneering work-based setup offers a unique chance to expose learners to real operations, from sorting and recycling to glass innovation and eco-construction.

1.3. Expected results in terms of teaching practices

· Learners gain workplace exposure and confidence in applying sustainable waste solutions.
· Teachers understand how to integrate real-world visits and internships into their VET programmes.
· Institutions build stronger links with the private sector.

1.4. Connection with the objectives of the WARP Project

This unit directly supports WARP's goal of enhancing green and digital competencies by:

- Embedding experiential learning within vocational education.
- Promoting collaboration between SMEs (like RecycAl) and VET institutions.

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• Creating replicable models of work-based learning in the green economy.

2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	Ability to understand and apply sustainable waste management practices in real working environments, including waste sorting, reuse, recycling preparation, and environmental protection measures.
Description of the Learning Outcomes related to this competence	By the end of the unit, learners will be able to: • Apply basic environmental standards in daily waste management work. • Identify recyclable and reusable materials correctly. • Follow safe and environmentally responsible working procedures. • Understand the environmental impact of improper waste handling.
Description of the evaluation criteria	Learning outcomes will be verified through: • Observation during on-site practical work. • Evaluation of workplace tasks and reports. • Supervisor feedback from RecycAl mentors. • Completion of practical assignments.

2.2. Digital competencies

Description of the competence	Ability to use basic digital tools for documentation, reporting, and monitoring of work-based learning activities, supported by NTUA for advanced digital aspects.
Description of the Learning Outcomes related to this competence	By the end of the unit, learners will be able to: • Use spreadsheets and simple databases for recording waste flows. • Prepare basic digital reports and work logs. • Use mobile devices for photo documentation. • Understand digital tracking systems introduced by NTUA

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Description of the evaluation criteria	Learning outcomes will be verified through: • Review of digital work logs and reports. • Assessment of uploaded documentation. • Practical exercises supervised by NTUA. • Completion of digital assignments. *(Digital components to be reviewed and validated by NTUA.)*

2.3. Pedagogical competencies

Description of the competence	Ability to learn through real workplace experience, teamwork, mentoring, and reflective practice in waste management operations.
Description of the Learning Outcomes related to this competence	By the end of the unit, learners will be able to: • Work effectively in operational teams. • Follow instructions from supervisors and mentors. • Reflect on their learning experience. • Apply feedback to improve performance. • Participate actively in training activities.
Description of the evaluation criteria	Learning outcomes will be verified through: • Mentor evaluation forms. • Participation in practical sessions. • Learning diaries or reflection reports. • Final practical assessment.

3. Learning outcomes

By the end of this course, students should be able to:

	Knowledge	**Skills**	**Competences**

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LO1	· Understand the basic structure and functioning of a waste management facility. · Know the main operational processes at the Circular Economy Park. · Understand health, safety, and environmental rules at the workplace.	· Perform basic waste sorting, handling, and preparation tasks. · Follow standard operating procedures. · Use basic tools and equipment safely.	· Work responsibly in a real waste management environment. · Apply environmental and safety standards in daily tasks. · Show professional behaviour in the workplace.
LO2	• Understand the principles of reuse, recycling, and material recovery. • Know the quality requirements for recyclable materials. • Understand basic logistics and storage procedures.	• Identify recyclable and reusable materials correctly. • Prepare materials for storage, baling, and transport. • Assist in loading, unloading, and internal logistics.	• Contribute effectively to material recovery operations. • Support circular economy practices through daily work. • Take responsibility for material quality.
LO3	· Understand basic digital documentation and reporting methods. · Know how work-based learning activities are monitored. · Understand simple performance indicators.	· Record daily activities in digital or paper logs. · Prepare short reports and photo documentation. · Use simple digital tools for communication.	• Maintain accurate work records. • Communicate work results professionally. • Support monitoring and evaluation processes. *(Digital elements supported by NTUA.)*
LO4	· Understand teamwork and workplace communication principles. · Know the role of supervisors and mentors. · Understand feedback and evaluation processes.	· Work in teams and follow instructions. · Communicate with supervisors and colleagues. · Apply feedback to improve performance.	· Demonstrate reliability and initiative. · Engage actively in learning activities. · Develop professional attitudes for future employment.
LO5	· Understand career pathways in waste management and recycling. · Know basic entrepreneurship and employment opportunities.	· Reflect on personal learning progress. · Identify areas for improvement.	· Show readiness for employment in the waste sector. · Plan future professional development.

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	· Understand ethical and social responsibilities in the sector.	· Prepare a basic personal development plan.	· Act as a responsible circular economy ambassador.

4. Teaching contents of the Unit *(the following are proposals for the content of the unit)*

Module 1: Work-Based Learning at the Circular Economy Park (RecycAl)			
Module number & title	**Content type**	**Content development**	**Notes**
1.*****	Paragraph/Heading	**Practical Training in Waste Management Operations** This unit introduces learners to real working conditions in waste management through supervised practice at the RecycAl Circular Economy Park. Students participate in daily operations related to waste sorting, material preparation, reuse activities, logistics, and workplace safety.	
1.1.	Paragraph/Subheading	**Learning Through Real Work Experience** This section focuses on hands-on learning in a professional recycling environment. Learners gain practical experience in handling recyclable materials, supporting reuse activities, and understanding operational workflows under staff supervision.	
1.1.	Paragraph	Learners take part in daily activities such as receiving waste, sorting materials, preparing plastics and glass for transport, assisting in storage and logistics, and supporting second-hand shop operations. Training is combined with reflection sessions and mentoring support from RecycAl and NTUA.	

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	Note	All activities follow workplace safety rules and environmental standards. Learners work under supervision and receive continuous feedback.	
	Columns	Operational Tasks • Waste reception and initial sorting • Manual separation of recyclable materials • Preparation of plastics and glass • Support to second-hand shop activities	   
		Learning Objectives • Understand daily waste management operations • Apply safety and hygiene procedures • Improve material quality handling • Develop professional discipline	
		Support and Supervision	

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<table>
<tr><td></td><td></td><td>Guidance by RecycAl technical staff
Mentoring and reflection sessions
Digital monitoring (supported by NTUA)
Regular performance feedback</td><td></td></tr>
<tr><td></td><td>Table</td><td><table><tr><td>Activity</td><td>Skill Development</td><td>Supervision</td></tr><tr><td>Waste sorting</td><td>Material identification</td><td>RecycAl supervisor</td></tr><tr><td>Storage & logistics</td><td>Handling and organization</td><td>Mentor & NTUA support</td></tr></table></td><td></td></tr>
<tr><td></td><td>Divider</td><td>By default, dividers are labeled as CONTINUE, but you can customize this label as needed.</td><td></td></tr>
<tr><td>2.</td><td>Statement</td><td>Work-based learning enables learners to develop real professional skills by participating directly in waste management operations.</td><td></td></tr>
<tr><td>3.</td><td>List</td><td>· Receiving and checking incoming materials
· Sorting and quality control
· Baling and storage support
· Reuse and repair assistance
· Workplace documentation</td><td>Use a bulleted list</td></tr>
<tr><td>4.</td><td>Chart</td><td>Distribution of Work Activities at RecycAl
Use these values:
Second-hand and reuse: 40%
Glass preparation: 30%
Plastic sorting and baling: 20%
Metals and others: 10%
(This shows how learners spend their time during training.)</td><td>Use a line chart</td></tr>
</table>

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5. Image	Image	**Caption (optional):** Students participating in supervised waste sorting activities at RecycAl.	
5. Image	Image	**Caption (optional):** “Overview of daily operations at the Circular Economy Park.”	  

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5. Image	Image	**Text:** This training session shows learners preparing recyclable plastics for transport. **Caption (optional):** Plastic preparation and baling activity.	Plastic preparation and baling activity.  

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5. Image	Image	**Captions (optional):** 1. “Glass sorting area” 2. “Second-hand shop activities” 3. “Logistics and storage zone”	  

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5. Image	Image	**Working areas at RecycAl Circular Economy Park:** • Glass processing and storage area • Plastic sorting and baling area • Second-hand shop and repair station Caption (optional): Main working zones used for work-based learning at RecycAl Circular Economy Park.	 
6. Video & audio	Video	Content development: Short video presenting daily work-based learning activities at RecycAl, including material handling, safety procedures, and teamwork.	https://www.youtube.com/watch?v=Cl6HRJWomnM&t=103s
6. Video & audio	Video	Purpose: • Shows real-life learning in action	
6. Video & audio	Audio	Content development: Audio recording with a supervisor explaining mentoring, safety rules, and learning objectives for trainees. Transcript: "This audio explains how students are guided during daily operations and how performance is evaluated." File to add: • supervisor_guidance.mp3	Add audio file (filename.mp3)

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7. Files	File	This file contains internship guidelines, safety rules, and task descriptions for learners. Example text to write: "Download the trainee handbook, including work schedules, safety procedures, and reporting templates." File to add: • trainee_manual_recycal.pdf	Manual for Students.docx
8. Accordion and tabs	Accordion	Safety and Work Rules Description (Write text): Overview of health, safety, and operational rules that learners must follow during practical training.	
	Accordion	Header: Daily Work Tasks Description: Description of daily activities such as sorting, weighing, recording, cleaning, and maintenance.	https://www.youtube.com/watch?v=Cl6HRJWomnM&t=103s
8. Accordion and tabs	Tab	TAB 1 – Header: **Internship Preparation** TAB 1 – Description: Introduction to workplace rules, safety equipment, daily schedules, and learning objectives before starting practical work.	
	Tab	TAB 2 – Header: **Practical Training in Action** TAB 2 – Description: Demonstration of learners performing real tasks under supervision, including sorting, weighing, and material handling.	

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9. Labeled graphic	Labeled graphic	**Title:** Glass Processing Area **Description:** Area where waste glass is sorted, crushed, and prepared for recycling.	  
		Title: Plastic Sorting and Baling **Description:** Process of separating, pressing, and preparing plastic for external recycling.	

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		Marker 3 – Add Audio **Title:** Supervisor Explanation **Description:** Audio explanation of work tasks and safety rules.	Add audio (file-name.mp3)
		Marker 4 **Title:** Second-Hand and Repair Area **Description:** Space where reusable products are cleaned, repaired, and resold.	
10.Scenario	Scenario	Character and Background: Arben, 22 years old, trainee at RecycAl, starting his first week in waste manage-ment practice. Instructions:	

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		Help Arben follow safety rules, choose correct tasks, and solve workplace challenges.	
		▶ Slide 2 – Scenario (max ~200 characters) Arben receives mixed waste. Some glass is broken and plastics are dirty. What should he do first: clean, separate, report, or continue sorting?	
		▶ Slide 3 – Closing Text Correct decisions improve safety, efficiency, and learning quality in real working environments.	
11.Timeline	Timeline	**Date 1: 2023** Establishment of RecycAl Circular Economy Park and start of pilot internship programmes.	 
		Date 2: 2024 Expansion of work-based learning with structured VET cooperation and international partners.	Short explanation of RecycAl's development and training mission)
12.Flashcards	Flashcards	Flashcard 1 **Front: Image** Photo of safety equipment (gloves, helmet, vest) **Back: Text** Always wear personal protective equipment before starting work.	

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		Flashcard 2 **Front:** **Image** Photo of separated waste containers **Back:** **Image** Diagram showing correct waste separation	 
		Flashcard 3 **Front:** **Text** Why is sorting important?	
13. Multiple choice and multiple response	Multiple choice	Question 1 What is the first step when receiving mixed waste?	Correct Answer: Answer 1
		Answer 1 Separate materials by type (glass, plastic, metal) **Feedback:** Correct. Separation is essential for safe and efficient recycling.	
		Answer 2 Store everything together **Feedback:**	

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		Incorrect. Mixed storage reduces recycling quality.	
13. Multiple choice and multiple response	Multiple answer	Question 1 Which actions improve workplace safety? (Select all correct answers)	Correct Answers: Answer 1 and Answer 2
		Answer 1 Wearing gloves and safety shoes **Feedback:** Correct. Protective equipment reduces injuries.	
		Answer 2 Following supervisor instructions **Feedback:** Correct. Supervision ensures safe operations.	
		Answer 3 Ignoring warning signs **Feedback:** Incorrect. Warning signs must always be respected.	
14. Matching and fill in the blank	Matching	First choice / First match Glass waste → Crushing and filtering Second choice / Second match Plastic waste → Sorting and baling Third choice / Third match Second-hand items → Cleaning and repair	
14. Matching and fill in the blank	Fill in the blank	Sentence: Before starting work, trainees must wear _____ equipment.	Missing word(s): personal protective

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5 Activities (examples)

Module 1: Module 8: Work-Based Learning in Waste Management at RecycAl			
Module number & title	**Activity type**	**Activity development**	**Notes**
Flashcards	Flashcards	Flashcard 1 Front: Image (PPE equipment at RecycAl) Back: Text: "Always wear gloves, vest, and safety shoes before work."	
Flashcards	Flashcards	Flashcard 2 Front: Image (Separated waste containers) Back: Image (Diagram of material flow)	
Flashcards	Flashcards	Flashcard 3 Front: Text: "Why is sorting important?" Back: Image (Clean glass and plastic ready for sale)	
Multiple choice and multiple response	Multiple choice	**Activity type:** Multiple choice **Activity development:** Question 1 What should be done before storing recycled materials? Answer 1	**Notes:** Specify the right answer: Answer 1

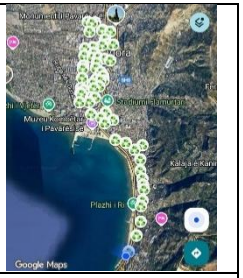
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		Clean and separate them Feedback: Correct. Clean materials have higher market value. Answer 2 Mix them together Feedback: Incorrect. Mixed materials reduce quality.	
Multiple choice and multiple response	Multiple answer	**Activity type:** Multiple answer **Activity development:** Question 1 Which actions improve work efficiency? (Select all) Answer 1 Proper sorting Feedback: Correct. Answer 2 Recording quantities Feedback: Correct. Answer 3 Leaving waste unmanaged Feedback: Incorrect.	**Notes:** Specify the right answers: Answer 1 and Answer 2
Matching and fill in the blank	Matching	**Activity type:** Matching **Activity development:** Glass → Crushing and filtering Plastic → Sorting and baling Second-hand items → Cleaning and repair	
Matching and fill in the blank	Fill in the blank	**Activity type:** Fill in the blank **Activity development:** Before starting work, trainees must wear _____ equipment.	**Notes:** Specify missing word: personal protective

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Digital map	Digital map	**Activity type:** Digital map **Activity development:** Creation of a digital map showing local waste collection points, partner companies, and RecycAl facilities using Google Maps or OpenStreetMap.	
Design of a small waste-separation system within the institution		**Activity type:** Design activity **Activity development:** Students design a small separation system for their school/workplace including containers, labels, collection routes, and storage points.	**Notes:** Include sketch or diagram
Digital simulation		**Activity type:** Digital simulation **Activity development:** Simulation of the life cycle of a glass bottle from collection to recycling and resale using simple digital tools.	**Notes:** Optional animation
Digital awareness	Videos, infographics	**Activity type:** Videos, infographics **Activity development:** Creation of short videos and infographics promoting waste separation, reuse, and recycling in the community.	**Notes:** Publish on social media
Hackathon	Hackathon	**Activity type:** Hackathon **Activity development:** Mini-hackathon where students develop practical solutions to improve waste management at RecycAl or in their institutions (logistics, awareness, reuse ideas).	**Notes:** Team-based activity

6. Methodology

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5.1. Project-Based Learning (PBL) and collaborative Learning	Learners work in small teams on real operational tasks at RecycAl, such as organizing collection points, improving sorting systems, and proposing workflow improvements. Each group develops a practical mini-project linked to daily waste management activities.
5.2. Collaborative learning between institutions in Albania and Kosovo	Students and trainers from Albania and Kosovo exchange experiences through joint online meetings, shared case studies, and field visits. Good practices from RecycAl and partner institutions are discussed and adapted to different local contexts.
5.3. Blended Learning	The unit combines on-site practical training at RecycAl with online learning materials, videos, and digital assignments. Learners prepare online and apply knowledge during field activities.
5.4. Online and mobile Learning tools	Learners use smartphones and digital platforms for data collection, documentation, reporting, and communication. Simple tools such as Google Drive, WhatsApp groups, and mapping applications support learning.
5.5. Real case studies	Training is based on real RecycAl operations, including glass recycling, plastic sorting, second-hand management, and logistics. Learners analyse real challenges and propose improvement measures.
5.6. Visits to companies in the sector	Learners participate in guided visits to recycling facilities, collection centers, and partner companies. These visits help them understand professional standards and market requirements.
5.7. Workshops and experiential learning	Hands-on workshops allow learners to practice sorting, processing, safety procedures, and quality control. Learning takes place through direct experience and reflection
5.8. Community based and participatory approaches	Learners engage with local communities, schools, and businesses through awareness actions and pilot initiatives. They actively participate in promoting sustainable waste management.

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7. Resources

Possible resources related to the topic of the unit:

- RecycAl facilities and equipment
- Safety equipment (gloves, vests, helmets)
- Waste sorting containers and labels
- Digital devices (smartphones, tablets, laptops)
- Google Maps and mapping tools
- Training manuals and SOPs
- EU waste management guidelines
- Videos and case studies from RecycAl
- Partner institution materials
- Recording and reporting templates

8. Assessment criteria

Include the assessment criteria for this unit:

8.1. Use of digital tools *(sample for possible tools to be used)*
Ability to use digital platforms for documentation, mapping, reporting, and awareness activities.

8.2. Understanding the sustainability framework
Demonstrated understanding of circular economy principles, waste hierarchy, and environmental impacts.

8.3. Ability to implement real improvements
Capacity to propose and apply practical improvements in sorting, logistics, safety, and organization.

8.4. Final Product: waste management plan for your VET institution
Development of a concrete improvement plan for RecycAl or the learner's institution, including actions, responsibilities, and monitoring.

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8.5. Self- and co-assessment
Learners reflect on their own performance and evaluate teamwork and cooperation.

9. Inclusion of the EU/transnational perspective

Comparison of waste management practices in Albania and Kosovo with EU standards, focusing on collection systems, quality control, safety regulations, and market requirements. Learners analyse how European best practices can be adapted to local conditions through RecycAl's operational model and regional cooperation.

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Module 9 – Pedagogical Approaches for Teaching Sustainability

1. Overview of the Unit

1.1. Unit information

Unit title	Pedagogical approaches for teaching sustainability
This unit is part of…	Standalone course (or) Part of Module #
Prerequisites (if any)	N/A (or) Learners must complete Module #
Unit designer	Maria S. Kasidoni

1.2. Justification and objectives of the Teaching Unit

This unit introduces innovative pedagogical approaches that enable VET trainers to effectively integrate sustainability concepts—particularly waste management, recycling, and plastic reduction—into vocational education and training. The unit focuses on learner-centred, participatory, and practice-oriented teaching methods aligned with green and digital transitions.
Participants will explore how sustainability can be taught not only as technical knowledge, but also as a set of values, competences, and behaviours relevant to real labour market needs. The unit emphasizes project-based learning, experiential learning, digital tools, and community-based approaches to enhance learner engagement and impact.
Estimated duration: 20–25 hours (blended learning)

1.3. Contextualization of the issue in the country (Albania or Kosovo)

In Albania and Kosovo, vocational education systems are increasingly expected to respond to environmental challenges such as plastic waste management, limited recycling infrastructure, and low levels of environmental awareness among citizens and businesses. While policy frameworks are gradually aligning with EU sustainability goals, teaching practices in VET often remain traditional, theory-oriented, and insufficiently connected to real-life environmental challenges.
There is a clear need to strengthen the pedagogical capacity of VET trainers so they can integrate sustainability in a practical, applied, and context-sensitive manner. Innovative teaching approaches can help bridge the gap between policy ambitions, industry needs, and learners' skills, supporting the green and digital transition of local economies.

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1.3. Expected results in terms of teaching practices

After completing this unit, VET trainers are expected to:

- Apply learner-centred and project-based pedagogical approaches to sustainability topics
- Design learning activities that combine environmental awareness with practical skills
- Integrate digital tools and OERs to support sustainability education
- Facilitate collaborative, interdisciplinary, and problem-based learning
- Act as change agents promoting sustainable practices within their institutions

1.4. Connection with the objectives of the WARP Project

This unit directly contributes to the WARP project's objectives by:

- Strengthening **pedagogical competencies** of VET trainers for the dual transition
- Supporting the integration of **green and digital competences** into VET curricula
- Promoting **innovative, flexible, and modular training approaches**
- Enhancing capacity building through **OERs, blended learning, and collaboration**
- Supporting the creation of a **Community of Practice** among VET professionals in the Western Balkans and the EU

2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	Ability to understand, teach, and promote sustainability principles, with a focus on waste management, recycling, and circular economy practices.
Description of the Learning Outcomes related to this competence	□ Explain core sustainability concepts relevant to VET contexts □ Integrate environmental responsibility into vocational teaching scenarios □ Promote sustainable behaviours among learners

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Description of the evaluation criteria	□ Sustainability concepts are correctly integrated into lesson plans □ Learning activities address real environmental challenges □ Learners demonstrate increased awareness of sustainable practices

2.2. Digital competencies

Description of the competence	Ability to use digital tools, platforms, and OERs to enhance sustainability education and learner engagement.
Description of the Learning Outcomes related to this competence	□ Use digital platforms to deliver sustainability-related content □ Develop or adapt OERs for sustainability teaching □ Apply digital tools for collaboration, assessment, and reflection
Description of the evaluation criteria	□ Effective use of digital learning environments □ Quality and usability of digital teaching materials □ Appropriate selection of digital tools for pedagogical purposes

2.3. Pedagogical competencies

Description of the competence	Ability to design and implement innovative, learner-centred teaching methodologies for sustainability education.
Description of the Learning Outcomes related to this competence	□ Apply project-based, experiential, and collaborative learning methods □ Facilitate participatory and inclusive learning environments □ Align teaching methods with sustainability learning objectives
Description of the evaluation criteria	□ Coherence between objectives, methods, and assessment □ Active learner participation □ Reflection on pedagogical effectiveness

3. Learning outcomes

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By the end of this course, students should be able to:

	Knowledge	**Skills**	**Competences**
LO1	Understand key pedagogical approaches for teaching sustainability	Select appropriate teaching methods	Apply innovative pedagogies in VET
LO2	Understand the link between sustainability and VET	Design sustainability-focused learning activities	Integrate sustainability across curricula
LO3	Know digital tools and OERs for sustainability education	Use digital platforms and resources	Facilitate blended and digital learning
L04	Understand learner-centred and participatory approaches	Facilitate collaborative learning	Promote learner engagement and responsibility

4. Teaching contents of the Unit *(the following are proposals for the content of the unit)*

Module 9: Write here the title of your module.			
Module number & title	**Content type**	**Content development**	**Notes**
9.1	Paragraph/Heading	Foundations of Sustainability Pedagogy	
	Paragraph	**1. Introduction to Sustainability in Education** Sustainability in education combines environmental, social, and economic responsibility. In VET, it prepares learners to apply sustainable practices in real jobs and everyday professional decisions.	
	Paragraph	**1.1. Education for Sustainable Development (ESD)** Education for Sustainable Development empowers learners to take responsible decisions for society, the economy, and the environment through active, learner-centred teaching approaches.	
	Paragraph	**1.2. Sustainability as a Transversal Competence in VET** Sustainability is a transversal competence relevant to all professions. In VET, it should be embedded across subjects, workshops, and practical training, not	

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		taught as a separate topic.	
	Paragraph	**1.3. Role of VET Trainers in the Green Transition** VET trainers act as change agents by promoting sustainable thinking, linking learning to real challenges, and encouraging responsible behaviour in professional contexts.	
	Paragraph	**1.4. From Knowledge Transmission to Transformative Learning** Sustainability pedagogy moves beyond lectures. It focuses on active learning, reflection, collaboration, and real-life problem solving to support long-term behaviour change.	
	Paragraph	**1.5. Sustainability Pedagogy in Waste Management and Recycling** Teaching waste management through practical tasks helps learners understand material life cycles, reduce environmental impact, and apply recycling solutions in real settings.	
	Paragraph	**1.6. Sustainability Pedagogy and the Digital Transition** Digital tools support sustainability education through simulations, collaboration, and OERs. Green and digital skills together improve engagement and flexible learning.	
9.2	Paragraph/Heading	Innovative Pedagogical Approaches	
	Paragraph	**Introduction** Innovative pedagogical approaches promote active learning, learner engagement, and real-world problem solving. They support sustainability education by linking theory with practice and encouraging responsibility.	
	Paragraph	**Project-Based Learning (PBL)** Project-Based Learning engages learners in solving real sustainability challenges. Learners work in teams to design practical solutions, such as waste reduction or recycling systems.	
	Paragraph	**Problem-Based Learning** Problem-Based Learning starts from real environmental problems. Learners	

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		analyse situations, explore solutions, and develop critical thinking skills through guided inquiry.	
	Paragraph	**Experiential Learning** Experiential learning focuses on learning through action. Hands-on activities, simulations, and workshops help learners understand sustainability concepts through direct experience.	
	Paragraph	**Case-Based Learning** Case-based learning uses real or realistic scenarios from industry or communities. Learners analyse cases related to waste management and sustainability practices.	
	Paragraph	**Collaborative Learning** Collaborative learning encourages teamwork and peer learning. Learners share responsibilities, exchange ideas, and develop communication skills while working on sustainability tasks.	
	Paragraph	**Inquiry-Based Learning** Inquiry-based learning promotes curiosity and exploration. Learners investigate sustainability issues, ask questions, and build knowledge through research and experimentation.	
	Paragraph	**Learner-Centred Teaching** Learner-centred teaching adapts content to learners' needs and experiences. Trainers act as facilitators, supporting autonomy, motivation, and active participation.	
	Paragraph	**Innovative Approaches for Sustainability in VET** Innovative pedagogies help learners apply sustainability principles in vocational contexts, supporting green skills, digital tools, and labour market relevance.	
9.3	Paragraph/Heading	Digital and Blended Learning for Sustainability	
	Paragraph	**Introduction**	

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		Digital and blended learning combine online and face-to-face methods. They support flexible, inclusive, and interactive sustainability education in vocational training.	
	Paragraph	**Blended Learning in Sustainability Education** Blended learning mixes classroom teaching with online activities. It allows learners to explore sustainability topics at their own pace and apply knowledge in practice.	
	Paragraph	**Virtual Learning Environments (VLEs)** Virtual Learning Environments provide access to courses, resources, and assessments. They support collaboration, communication, and tracking of sustainability learning outcomes.	
	Paragraph	**Open Educational Resources (OERs)** OERs are free learning materials that can be reused and adapted. They help VET trainers teach sustainability using up-to-date, accessible, and flexible content.	
	Paragraph	**Digital Tools for Collaboration** Digital tools enable teamwork through shared documents, forums, and video meetings. They support cross-border collaboration on sustainability projects.	
	Paragraph	**Digital Simulations and Interactive Content** Simulations and interactive tools help learners understand complex sustainability processes, such as waste life cycles and recycling systems.	
	Paragraph	**Online Assessment and Feedback** Digital assessments provide timely feedback and support self-reflection. They help evaluate sustainability knowledge, skills, and practical application.	
	Paragraph	**Mobile Learning for Sustainability** Mobile learning allows access to sustainability content anytime and anywhere. It supports field activities, data collection, and informal learning.	
	Paragraph	**Digital Responsibility and Sustainability**	

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		Digital learning should promote responsible use of technology, data protection, and awareness of the environmental impact of digital tools.	
9.3	Paragraph/Heading	Digital and Blended Learning for Sustainability	
	Paragraph	**Introduction** Digital and blended learning combine online tools with face-to-face teaching. They support flexible, inclusive, and engaging sustainability education in VET.	
	Paragraph	**Blended Learning Approach** Blended learning mixes classroom sessions with online activities. It allows learners to study sustainability topics at their own pace and apply them in practice.	
	Paragraph	**Virtual Learning Environments (VLEs)** VLEs provide access to learning materials, activities, and assessments. They support collaboration, communication, and monitoring of sustainability learning.	
	Paragraph	**Open Educational Resources (OERs)** OERs are free and adaptable digital resources. They support sustainability education by providing accessible, reusable, and up-to-date learning materials.	
	Paragraph	**Digital Tools for Collaboration** Digital tools enable teamwork through shared documents, forums, and video calls. They support joint sustainability projects and peer learning.	
	Paragraph	**Interactive and Digital Simulations** Interactive content and simulations help learners understand sustainability processes, such as waste flows, recycling systems, and resource efficiency.	
	Paragraph	**Online Assessment and Feedback** Digital assessments offer quick feedback and support self-assessment. They help evaluate sustainability knowledge, skills, and practical application.	
	Paragraph	**Mobile Learning** Mobile learning allows access to sustainability content anytime. It supports	

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		fieldwork, data collection, and learning beyond the classroom.	
	Paragraph	**Digital Responsibility and Sustainability** Digital learning should promote responsible technology use, data protection, and awareness of the environmental impact of digital tools.	
9.4	Paragraph/Heading	Community-Based and Real-World Learning	
	Paragraph	**Introduction** Community-based learning connects education with real social and environmental challenges. It helps learners apply sustainability knowledge in real-life and local contexts.	
	Paragraph	**Learning Through Real-World Problems** Real-world learning uses authentic problems, such as local waste management issues, to develop practical skills and critical thinking.	
	Paragraph	**Collaboration with Local Communities** Working with local communities helps learners understand sustainability needs and co-create solutions relevant to their environment.	
	Paragraph	**Partnerships with Industry and Institutions** Collaboration with companies and institutions exposes learners to real sustainability practices and labour market expectations.	
	Paragraph	**Service Learning** Service learning combines education with community service. Learners apply sustainability knowledge while contributing to positive environmental impact.	
	Paragraph	**Work-Based Learning** Work-based learning allows learners to develop sustainability skills in real workplaces, linking training with professional practice.	
	Paragraph	**Cross-Border and Transnational Cooperation** International cooperation encourages sharing good practices between Albania, Kosovo, and EU partners in sustainability education.	
	Paragraph	**Reflection and Learning from Experience**	

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		Reflection helps learners analyse experiences, improve solutions, and strengthen sustainable attitudes and behaviours.	

5 Activities (examples)

Module 9: Write here the title of your module.			
Module number & title	**Activity type**	**Activity development**	**Notes**
Unit 1: Foundations of Sustainability Pedagogy	Flashcards	Flashcard 1 Front: Image of the three pillars of sustainability Back: Text explaining social, environmental, and economic dimensions	
		Flashcard 2 Front: Text "What is systems thinking in sustainability?" Back: Image illustrating feedback loops or interconnected systems	
		Flashcard 3 Front: Text "Give an example of a local sustainability challenge" Back: Image showing a local environmental issue	
	Multiple choice	Question 1: Which of the following is NOT considered a pillar of sustainability? Answer 1: Social Feedback: Incorrect, social is one of the pillars. Answer 2: Economic Feedback: Incorrect, economic is one of the pillars. Answer 3: Cultural Feedback: Correct, cultural is not considered a core pillar in this framework. Answer 4: Environmental Feedback: Incorrect, environmental is one of the pillars.	

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		Right answer: Cultural	
	Matching	Systems thinking / Interconnected approach Triple bottom line / Social, economic, environmental Local challenge / Waste management	
	Fill in the blank	The _____ approach considers the interconnections between environmental, social, and economic factors. Answer: systems thinking	
	Digital map	Creation of a digital map showing local sustainability initiatives (parks, recycling points, renewable energy sites)	
Unit 2: Innovative Pedagogical Approaches	Flashcards	Flashcard 1 Front: Text "Active learning strategy" Back: Image of students in a collaborative activity	
		Flashcard 2 Front: Image of a flipped classroom setup Back: Text explaining the flipped classroom process	
		Flashcard 3 Front: Text "Design thinking step 1" Back: Image showing empathy or user research	
	Multiple choice	Question 1: Which method emphasizes student collaboration and problem-solving? Answer 1: Lecture Feedback: Incorrect, lectures are more teacher-centered. Answer 2: Project-based learning Feedback: Correct, this emphasizes collaboration and problem-solving. Answer 3: Reading assignment Feedback: Incorrect, this is a passive method. Right answer: Project-based learning	
	Multiple answer	Question 1: Select all activities that can be part of a gamified learning strategy.	

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		Answer 1: Simulations Feedback: Correct Answer 2: Quizzes with points Feedback: Correct Answer 3: Listening to a lecture Feedback: Incorrect Right answers: Simulations, Quizzes with points	
	Digital simulation	Digital simulation of an energy-efficient building or carbon footprint scenario	
	Hackathon	Mini hackathon to prototype an educational game addressing local sustainability challenges	
Unit 3: Digital and Blended Learning for Sustainability	Flashcards	Flashcard 1 Front: Text "What is blended learning?" Back: Image showing a mix of online and in-person learning	
		Flashcard 2 Front: Image of a virtual field trip Back: Text describing how VR can enhance sustainability learning	
		Flashcard 3 Front: Text "Name one platform for collaborative online projects" Back: Image of Miro or Padlet	
	Multiple choice	Question 1: Which tool allows collaborative digital brainstorming? Answer 1: Padlet Feedback: Correct Answer 2: Word document Feedback: Incorrect, not collaborative in real-time Answer 3: PowerPoint Feedback: Incorrect, limited collaboration features Right answer: Padlet	
	Digital awareness	Creation of digital campaigns (videos, infographics) promoting sustainable behaviors	

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	Digital map	Mapping local renewable energy installations or sustainable businesses	
Unit 4: Community-Based and Real-World Learning	Flashcards	Flashcard 1 Front: Text "Example of service-learning" Back: Image of students planting trees	
		Flashcard 2 Front: Image showing water quality testing Back: Text explaining citizen science participation	
		Flashcard 3 Front: Text "Stakeholder engagement" Back: Image of a meeting with community members	
	Multiple choice	Question 1: What is the main goal of community-based learning? Answer 1: Memorize sustainability concepts Feedback: Incorrect, focus is on application Answer 2: Apply learning to real-world challenges Feedback: Correct Answer 3: Only complete online assignments Feedback: Incorrect Right answer: Apply learning to real-world challenges	
	Fill in the blank	Students conducting local biodiversity surveys are participating in _____ science. Answer: citizen	
	Design of a small waste-separation system within the institution	Students design and implement a small-scale recycling or waste-separation system	
	Digital simulation	Simulation showing the life cycle of a product (e.g., plastic bottle) to visualize impact	

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6. Methodology

5.1. Project-Based Learning (PBL) and collaborative Learning	Learners work in teams to design sustainability-focused teaching projects linked to real VET contexts.
5.2. Collaborative learning between institutions in Albania and Kosovo	Joint activities, peer exchange, and sharing of good practices.
5.3. Blended Learning	Combination of face-to-face workshops and online learning activities.
5.4. Online and mobile Learning tools	Use of digital platforms, collaborative documents, and multimedia resources.
5.5. Real case studies	Analysis of real sustainability challenges in VET institutions and companies.
5.6. Visits to companies in the sector	Optional visits to recycling or waste-management facilities.
5.7. Workshops and experiential learning	Hands-on activities, simulations, and role-playing.
5.8. Community based and participatory approaches	Engagement with local communities and stakeholders.

7. Resources

- EU GreenComp Framework
- Erasmus+ Sustainability Guidelines
- Open Educational Resources on sustainability and ESD
- Digital collaboration platforms
- Case studies from VET institutions

8. Assessment criteria

Include the assessment criteria for this unit:

- Effective use of digital tools
- Understanding of sustainability frameworks

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- Ability to design and implement pedagogical innovations
- **Final product:** Sustainability-oriented teaching plan or mini project
- Self- and peer-assessment

9. Inclusion of the EU/transnational perspective

The unit encourages comparison between sustainability teaching practices in Albania, Kosovo, and EU countries. Participants explore how European frameworks (ESD, GreenComp, circular economy principles) can be adapted to local VET contexts, considering institutional capacity, labour market needs, and socio-economic conditions. Cross-border collaboration supports mutual learning and alignment with EU standards while respecting local realities.

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Module 10 – Integrating Circular Economy Concepts into VET

1. Overview of the Unit

1.1. Unit information

Unit title	Pedagogical approaches for teaching sustainability
This unit is part of…	Standalone course (or) Part of Module #
Prerequisites (if any)	N/A (or) Learners must complete Module #
Unit designer	Maria S. Kasidoni

1.2. Justification and objectives of the Teaching Unit

This unit introduces innovative pedagogical approaches that enable VET trainers to effectively integrate sustainability concepts—particularly waste management, recycling, and plastic reduction—into vocational education and training. The unit focuses on learner-centred, participatory, and practice-oriented teaching methods aligned with green and digital transitions.
Participants will explore how sustainability can be taught not only as technical knowledge, but also as a set of values, competences, and behaviours relevant to real labour market needs. The unit emphasizes project-based learning, experiential learning, digital tools, and community-based approaches to enhance learner engagement and impact.
Estimated duration: 20–25 hours (blended learning)

1.3. Contextualization of the issue in the country (Albania or Kosovo)

In Albania and Kosovo, vocational education systems are increasingly expected to respond to environmental challenges such as plastic waste management, limited recycling infrastructure, and low levels of environmental awareness among citizens and businesses. While policy frameworks are gradually aligning with EU sustainability goals, teaching practices in VET often remain traditional, theory-oriented, and insufficiently connected to real-life environmental challenges.
There is a clear need to strengthen the pedagogical capacity of VET trainers so they can integrate sustainability in a practical, applied, and context-sensitive manner. Innovative teaching approaches can help bridge the gap between policy ambitions, industry needs, and learners' skills, supporting the green and digital transition of local economies.

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1.3. Expected results in terms of teaching practices

After completing this unit, VET trainers are expected to:

- Apply learner-centred and project-based pedagogical approaches to sustainability topics
- Design learning activities that combine environmental awareness with practical skills
- Integrate digital tools and OERs to support sustainability education
- Facilitate collaborative, interdisciplinary, and problem-based learning
- Act as change agents promoting sustainable practices within their institutions

1.4. Connection with the objectives of the WARP Project

This unit directly contributes to the WARP project's objectives by:

- Strengthening **pedagogical competencies** of VET trainers for the dual transition
- Supporting the integration of **green and digital competences** into VET curricula
- Promoting **innovative, flexible, and modular training approaches**
- Enhancing capacity building through **OERs, blended learning, and collaboration**
- Supporting the creation of a **Community of Practice** among VET professionals in the Western Balkans and the EU

2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	Ability to understand, teach, and promote sustainability principles, with a focus on waste management, recycling, and circular economy practices.
Description of the Learning Outcomes related to this competence	□ Explain core sustainability concepts relevant to VET contexts □ Integrate environmental responsibility into vocational teaching scenarios □ Promote sustainable behaviours among learners

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Description of the evaluation criteria	□ Sustainability concepts are correctly integrated into lesson plans □ Learning activities address real environmental challenges □ Learners demonstrate increased awareness of sustainable practices

2.2. Digital competencies

Description of the competence	Ability to use digital tools, platforms, and OERs to enhance sustainability education and learner engagement.
Description of the Learning Outcomes related to this competence	□ Use digital platforms to deliver sustainability-related content □ Develop or adapt OERs for sustainability teaching □ Apply digital tools for collaboration, assessment, and reflection
Description of the evaluation criteria	□ Effective use of digital learning environments □ Quality and usability of digital teaching materials □ Appropriate selection of digital tools for pedagogical purposes

2.3. Pedagogical competencies

Description of the competence	Ability to design and implement innovative, learner-centred teaching methodologies for sustainability education.
Description of the Learning Outcomes related to this competence	□ Apply project-based, experiential, and collaborative learning methods □ Facilitate participatory and inclusive learning environments □ Align teaching methods with sustainability learning objectives
Description of the evaluation criteria	□ Coherence between objectives, methods, and assessment □ Active learner participation □ Reflection on pedagogical effectiveness

3. Learning outcomes

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By the end of this course, students should be able to:

	Knowledge	**Skills**	**Competences**
LO1	Understand key pedagogical approaches for teaching sustainability	Select appropriate teaching methods	Apply innovative pedagogies in VET
LO2	Understand the link between sustainability and VET	Design sustainability-focused learning activities	Integrate sustainability across curricula
LO3	Know digital tools and OERs for sustainability education	Use digital platforms and resources	Facilitate blended and digital learning
L04	Understand learner-centred and participatory approaches	Facilitate collaborative learning	Promote learner engagement and responsibility

4. Teaching contents of the Unit *(the following are proposals for the content of the unit)*

Module 9: Write here the title of your module.			
Module number & title	**Content type**	**Content development**	**Notes**
9.1	Paragraph/Heading	Foundations of Sustainability Pedagogy	
	Paragraph	**1. Introduction to Sustainability in Education** Sustainability in education combines environmental, social, and economic responsibility. In VET, it prepares learners to apply sustainable practices in real jobs and everyday professional decisions.	
	Paragraph	**1.1. Education for Sustainable Development (ESD)** Education for Sustainable Development empowers learners to take responsible decisions for society, the economy, and the environment through active, learner-centred teaching approaches.	
	Paragraph	**1.2. Sustainability as a Transversal Competence in VET** Sustainability is a transversal competence relevant to all professions. In VET, it should be embedded across subjects, workshops, and practical training, not	

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		taught as a separate topic.	
	Paragraph	**1.3. Role of VET Trainers in the Green Transition** VET trainers act as change agents by promoting sustainable thinking, linking learning to real challenges, and encouraging responsible behaviour in professional contexts.	
	Paragraph	**1.4. From Knowledge Transmission to Transformative Learning** Sustainability pedagogy moves beyond lectures. It focuses on active learning, reflection, collaboration, and real-life problem solving to support long-term behaviour change.	
	Paragraph	**1.5. Sustainability Pedagogy in Waste Management and Recycling** Teaching waste management through practical tasks helps learners understand material life cycles, reduce environmental impact, and apply recycling solutions in real settings.	
	Paragraph	**1.6. Sustainability Pedagogy and the Digital Transition** Digital tools support sustainability education through simulations, collaboration, and OERs. Green and digital skills together improve engagement and flexible learning.	
9.2	Paragraph/Heading	Innovative Pedagogical Approaches	
	Paragraph	**Introduction** Innovative pedagogical approaches promote active learning, learner engagement, and real-world problem solving. They support sustainability education by linking theory with practice and encouraging responsibility.	
	Paragraph	**Project-Based Learning (PBL)** Project-Based Learning engages learners in solving real sustainability challenges. Learners work in teams to design practical solutions, such as waste reduction or recycling systems.	
	Paragraph	**Problem-Based Learning** Problem-Based Learning starts from real environmental problems. Learners	

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		analyse situations, explore solutions, and develop critical thinking skills through guided inquiry.	
	Paragraph	**Experiential Learning** Experiential learning focuses on learning through action. Hands-on activities, simulations, and workshops help learners understand sustainability concepts through direct experience.	
	Paragraph	**Case-Based Learning** Case-based learning uses real or realistic scenarios from industry or communities. Learners analyse cases related to waste management and sustainability practices.	
	Paragraph	**Collaborative Learning** Collaborative learning encourages teamwork and peer learning. Learners share responsibilities, exchange ideas, and develop communication skills while working on sustainability tasks.	
	Paragraph	**Inquiry-Based Learning** Inquiry-based learning promotes curiosity and exploration. Learners investigate sustainability issues, ask questions, and build knowledge through research and experimentation.	
	Paragraph	**Learner-Centred Teaching** Learner-centred teaching adapts content to learners' needs and experiences. Trainers act as facilitators, supporting autonomy, motivation, and active participation.	
	Paragraph	**Innovative Approaches for Sustainability in VET** Innovative pedagogies help learners apply sustainability principles in vocational contexts, supporting green skills, digital tools, and labour market relevance.	
9.3	Paragraph/Heading	Digital and Blended Learning for Sustainability	
	Paragraph	**Introduction**	

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		Digital and blended learning combine online and face-to-face methods. They support flexible, inclusive, and interactive sustainability education in vocational training.	
	Paragraph	**Blended Learning in Sustainability Education** Blended learning mixes classroom teaching with online activities. It allows learners to explore sustainability topics at their own pace and apply knowledge in practice.	
	Paragraph	**Virtual Learning Environments (VLEs)** Virtual Learning Environments provide access to courses, resources, and assessments. They support collaboration, communication, and tracking of sustainability learning outcomes.	
	Paragraph	**Open Educational Resources (OERs)** OERs are free learning materials that can be reused and adapted. They help VET trainers teach sustainability using up-to-date, accessible, and flexible content.	
	Paragraph	**Digital Tools for Collaboration** Digital tools enable teamwork through shared documents, forums, and video meetings. They support cross-border collaboration on sustainability projects.	
	Paragraph	**Digital Simulations and Interactive Content** Simulations and interactive tools help learners understand complex sustainability processes, such as waste life cycles and recycling systems.	
	Paragraph	**Online Assessment and Feedback** Digital assessments provide timely feedback and support self-reflection. They help evaluate sustainability knowledge, skills, and practical application.	
	Paragraph	**Mobile Learning for Sustainability** Mobile learning allows access to sustainability content anytime and anywhere. It supports field activities, data collection, and informal learning.	
	Paragraph	**Digital Responsibility and Sustainability**	

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		Digital learning should promote responsible use of technology, data protection, and awareness of the environmental impact of digital tools.	
9.3	Paragraph/Heading	Digital and Blended Learning for Sustainability	
	Paragraph	**Introduction** Digital and blended learning combine online tools with face-to-face teaching. They support flexible, inclusive, and engaging sustainability education in VET.	
	Paragraph	**Blended Learning Approach** Blended learning mixes classroom sessions with online activities. It allows learners to study sustainability topics at their own pace and apply them in practice.	
	Paragraph	**Virtual Learning Environments (VLEs)** VLEs provide access to learning materials, activities, and assessments. They support collaboration, communication, and monitoring of sustainability learning.	
	Paragraph	**Open Educational Resources (OERs)** OERs are free and adaptable digital resources. They support sustainability education by providing accessible, reusable, and up-to-date learning materials.	
	Paragraph	**Digital Tools for Collaboration** Digital tools enable teamwork through shared documents, forums, and video calls. They support joint sustainability projects and peer learning.	
	Paragraph	**Interactive and Digital Simulations** Interactive content and simulations help learners understand sustainability processes, such as waste flows, recycling systems, and resource efficiency.	
	Paragraph	**Online Assessment and Feedback** Digital assessments offer quick feedback and support self-assessment. They help evaluate sustainability knowledge, skills, and practical application.	
	Paragraph	**Mobile Learning** Mobile learning allows access to sustainability content anytime. It supports	

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		fieldwork, data collection, and learning beyond the classroom.	
	Paragraph	**Digital Responsibility and Sustainability** Digital learning should promote responsible technology use, data protection, and awareness of the environmental impact of digital tools.	
9.4	Paragraph/Heading	Community-Based and Real-World Learning	
	Paragraph	**Introduction** Community-based learning connects education with real social and environmental challenges. It helps learners apply sustainability knowledge in real-life and local contexts.	
	Paragraph	**Learning Through Real-World Problems** Real-world learning uses authentic problems, such as local waste management issues, to develop practical skills and critical thinking.	
	Paragraph	**Collaboration with Local Communities** Working with local communities helps learners understand sustainability needs and co-create solutions relevant to their environment.	
	Paragraph	**Partnerships with Industry and Institutions** Collaboration with companies and institutions exposes learners to real sustainability practices and labour market expectations.	
	Paragraph	**Service Learning** Service learning combines education with community service. Learners apply sustainability knowledge while contributing to positive environmental impact.	
	Paragraph	**Work-Based Learning** Work-based learning allows learners to develop sustainability skills in real workplaces, linking training with professional practice.	
	Paragraph	**Cross-Border and Transnational Cooperation** International cooperation encourages sharing good practices between Albania, Kosovo, and EU partners in sustainability education.	
	Paragraph	**Reflection and Learning from Experience**	

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		Reflection helps learners analyse experiences, improve solutions, and strengthen sustainable attitudes and behaviours.	

5 Activities (examples)

Module 9: Write here the title of your module.			
Module number & title	**Activity type**	**Activity development**	**Notes**
Unit 1: Foundations of Sustainability Pedagogy	Flashcards	Flashcard 1 Front: Image of the three pillars of sustainability Back: Text explaining social, environmental, and economic dimensions	
		Flashcard 2 Front: Text "What is systems thinking in sustainability?" Back: Image illustrating feedback loops or interconnected systems	
		Flashcard 3 Front: Text "Give an example of a local sustainability challenge" Back: Image showing a local environmental issue	
	Multiple choice	Question 1: Which of the following is NOT considered a pillar of sustainability? Answer 1: Social Feedback: Incorrect, social is one of the pillars. Answer 2: Economic Feedback: Incorrect, economic is one of the pillars. Answer 3: Cultural Feedback: Correct, cultural is not considered a core pillar in this framework. Answer 4: Environmental Feedback: Incorrect, environmental is one of the pillars.	

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		Right answer: Cultural	
	Matching	Systems thinking / Interconnected approach Triple bottom line / Social, economic, environmental Local challenge / Waste management	
	Fill in the blank	The _____ approach considers the interconnections between environmental, social, and economic factors. Answer: systems thinking	
	Digital map	Creation of a digital map showing local sustainability initiatives (parks, recycling points, renewable energy sites)	
Unit 2: Innovative Pedagogical Approaches	Flashcards	Flashcard 1 Front: Text "Active learning strategy" Back: Image of students in a collaborative activity	
		Flashcard 2 Front: Image of a flipped classroom setup Back: Text explaining the flipped classroom process	
		Flashcard 3 Front: Text "Design thinking step 1" Back: Image showing empathy or user research	
	Multiple choice	Question 1: Which method emphasizes student collaboration and problem-solving? Answer 1: Lecture Feedback: Incorrect, lectures are more teacher-centered. Answer 2: Project-based learning Feedback: Correct, this emphasizes collaboration and problem-solving. Answer 3: Reading assignment Feedback: Incorrect, this is a passive method. Right answer: Project-based learning	
	Multiple answer	Question 1: Select all activities that can be part of a gamified learning strategy.	

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		Answer 1: Simulations Feedback: Correct Answer 2: Quizzes with points Feedback: Correct Answer 3: Listening to a lecture Feedback: Incorrect Right answers: Simulations, Quizzes with points	
	Digital simulation	Digital simulation of an energy-efficient building or carbon footprint scenario	
	Hackathon	Mini hackathon to prototype an educational game addressing local sustainability challenges	
Unit 3: Digital and Blended Learning for Sustainability	Flashcards	Flashcard 1 Front: Text "What is blended learning?" Back: Image showing a mix of online and in-person learning	
		Flashcard 2 Front: Image of a virtual field trip Back: Text describing how VR can enhance sustainability learning	
		Flashcard 3 Front: Text "Name one platform for collaborative online projects" Back: Image of Miro or Padlet	
	Multiple choice	Question 1: Which tool allows collaborative digital brainstorming? Answer 1: Padlet Feedback: Correct Answer 2: Word document Feedback: Incorrect, not collaborative in real-time Answer 3: PowerPoint Feedback: Incorrect, limited collaboration features Right answer: Padlet	
	Digital awareness	Creation of digital campaigns (videos, infographics) promoting sustainable behaviors	

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	Digital map	Mapping local renewable energy installations or sustainable businesses	
Unit 4: Community-Based and Real-World Learning	Flashcards	Flashcard 1 Front: Text "Example of service-learning" Back: Image of students planting trees	
		Flashcard 2 Front: Image showing water quality testing Back: Text explaining citizen science participation	
		Flashcard 3 Front: Text "Stakeholder engagement" Back: Image of a meeting with community members	
	Multiple choice	Question 1: What is the main goal of community-based learning? Answer 1: Memorize sustainability concepts Feedback: Incorrect, focus is on application Answer 2: Apply learning to real-world challenges Feedback: Correct Answer 3: Only complete online assignments Feedback: Incorrect Right answer: Apply learning to real-world challenges	
	Fill in the blank	Students conducting local biodiversity surveys are participating in _____ science. Answer: citizen	
	Design of a small waste-separation system within the institution	Students design and implement a small-scale recycling or waste-separation system	
	Digital simulation	Simulation showing the life cycle of a product (e.g., plastic bottle) to visualize impact	

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6. Methodology

5.1. Project-Based Learning (PBL) and collaborative Learning	Learners work in teams to design sustainability-focused teaching projects linked to real VET contexts.
5.2. Collaborative learning between institutions in Albania and Kosovo	Joint activities, peer exchange, and sharing of good practices.
5.3. Blended Learning	Combination of face-to-face workshops and online learning activities.
5.4. Online and mobile Learning tools	Use of digital platforms, collaborative documents, and multimedia resources.
5.5. Real case studies	Analysis of real sustainability challenges in VET institutions and companies.
5.6. Visits to companies in the sector	Optional visits to recycling or waste-management facilities.
5.7. Workshops and experiential learning	Hands-on activities, simulations, and role-playing.
5.8. Community based and participatory approaches	Engagement with local communities and stakeholders.

7. Resources

- EU GreenComp Framework
- Erasmus+ Sustainability Guidelines
- Open Educational Resources on sustainability and ESD
- Digital collaboration platforms
- Case studies from VET institutions

8. Assessment criteria

Include the assessment criteria for this unit:

- Effective use of digital tools
- Understanding of sustainability frameworks

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- Ability to design and implement pedagogical innovations
- **Final product:** Sustainability-oriented teaching plan or mini project
- Self- and peer-assessment

9. Inclusion of the EU/transnational perspective

The unit encourages comparison between sustainability teaching practices in Albania, Kosovo, and EU countries. Participants explore how European frameworks (ESD, GreenComp, circular economy principles) can be adapted to local VET contexts, considering institutional capacity, labour market needs, and socio-economic conditions. Cross-border collaboration supports mutual learning and alignment with EU standards while respecting local realities.

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8.4 Learning Pathway 3 – VET Educational Designers

Module 11 – Curriculum Development for Waste Management Education

1. Overview of the Unit

1.1. Unit information

Unit title	Curriculum Development for Waste Management Education
This unit is part of…	Standalone course
Prerequisites (if any)	N/A

1.2. Justification and objectives of the Teaching Unit

Vocational Education and Training (VET) systems in Albania and Kosovo are facing a significant challenge: while waste management and environmental protection are increasingly recognised as priorities at policy level, these topics remain poorly integrated into vocational curricula. Most VET programmes address environmental issues through isolated awareness sessions rather than structured, competence-based learning pathways linked to real labour-market needs.

As a result, graduates entering the waste management, environmental services, construction, and manufacturing sectors lack the practical skills, professional knowledge, and environmental attitudes that employers increasingly require. At the same time, VET educators and curriculum designers often lack the methodological tools to translate national sustainability strategies and EU environmental frameworks into concrete, accessible curriculum structures.

This unit addresses this gap directly. It equips VET educational designers and senior trainers with the practical tools and methodologies needed to design, revise, and structure competence-based curricula that integrate waste management and sustainability as core components of vocational training — not as add-ons, but as professional competences embedded across the whole programme.

By the end of this unit, participants will be able to:

- Design complete VET curriculum frameworks for waste management education, based on learning outcomes, competences, and progression logic
- Integrate ecological sustainability, circular economy principles, and green skills into formal VET curricula
- Align curriculum content with labour-market needs, sectoral demands, and emerging green professions

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- Structure curricula into modules and units suitable for blended learning and Open Educational Resources (OER)
- Ensure coherence between learning outcomes, teaching activities, and assessment methods
- Adapt curricula to national VET contexts while ensuring compatibility with EU sustainability and education frameworks

Estimated duration: 20–25 hours (blended delivery).

1.3. Contextualization of the issue in the country (Albania or Kosovo)

Albania generates approximately 1.1 million tonnes of municipal solid waste per year. Less than 10% of this waste is currently recycled. The majority ends up in landfills — many of which do not meet EU environmental standards — or is disposed of illegally in rivers, forests, and open land. Waste separation at source is minimal, collection infrastructure is uneven, and circular economy practices remain largely absent from industry and institutions alike.

Kosovo faces similar challenges. Waste management infrastructure is underdeveloped, recycling rates are among the lowest in the region, and public awareness of waste separation and circular economy principles remains limited. Both countries have made EU integration commitments that require significant progress in environmental protection and sustainable waste management — but translating policy commitments into practice requires a workforce with the right competences.

This is where VET plays a critical role. The vocational education and training system is responsible for preparing the workforce for sectors directly connected to waste management: environmental services, construction, manufacturing, hospitality, and agriculture. Yet in both Albania and Kosovo, VET programmes in these sectors rarely include structured, competence-based content on waste management and sustainability. When environmental topics appear at all, they typically take the form of a single awareness lesson — not a systematic set of professional competences linked to learning outcomes, assessment criteria, and labour-market needs.

The consequences are visible. VET graduates enter workplaces without knowing how to conduct a waste audit, how to design a workplace waste separation system, how to apply the EU waste hierarchy in professional decision-making, or how to contribute to their employer's sustainability goals. Employers in the growing green economy — including waste management companies, recycling operators, and environmental services providers — report that graduates lack practical sustainability competences.

Furthermore, VET educators and curriculum designers in Albania and Kosovo often lack targeted professional development in competence-based curriculum design. Many are skilled in their vocational subject area but have not been trained to translate national sustainability strategies and EU environmental frameworks into structured, assessable curriculum components.

This unit responds directly to this context. By strengthening the capacity of VET educational designers to develop competence-based, sustainability-integrated curricula, it contributes to building the workforce that Albania and Kosovo need to meet their environmental commitments and to participate meaningfully in the European green transition.

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1.3. Expected results in terms of teaching practices

As a result of this unit, VET educators, trainers, and curriculum designers are expected to demonstrate measurable changes in the way they design and deliver vocational programmes — particularly in how they approach waste management and sustainability as curriculum content.

Specifically, the following results are expected:

From topic-based to competence-based curriculum design Participants will stop organising programmes around topics ("Lesson 1 — Types of waste") and start organising them around clearly defined learning outcomes and competences ("By the end of this module, learners will be able to conduct a waste audit for a small business using EU classification guidelines"). This shift is the foundation of everything else.

Sustainability embedded across the curriculum — not added at the end Participants will integrate waste management and circular economy competences systematically across their programmes, ensuring that sustainability is visible in learning outcomes, teaching activities, and assessment criteria in every relevant module — not confined to a single awareness session.

Improved alignment between outcomes, teaching, and assessment Participants will design curricula where what is taught, how it is taught, and how it is assessed all point toward the same competences. Learners will no longer be taught one thing, practised on another, and assessed on a third.

More practice-oriented and project-based teaching Participants will increase their use of project-based learning, real case studies, workplace simulations, and collaborative activities — replacing or reducing reliance on lectures and textbook-based teaching that develops only theoretical knowledge.

Digital and blended curriculum delivery Participants will design curricula that are suitable for blended and digital delivery, including the development of Open Educational Resources (OER) that can be shared, adapted, and reused across institutions and national contexts.

Stronger cross-institutional collaboration Participants will engage in peer curriculum review, co-design activities, and shared professional standards with colleagues from other VET institutions in Albania and Kosovo — building a professional community of practice in sustainability-integrated curriculum development.

1.4. Connection with the objectives of the WARP Project

The WARP project — Waste Management Awareness and Reskilling Programme — aims to strengthen VET systems in Albania and Kosovo by integrating waste management, circular economy, and sustainability principles into vocational education and training. This unit is one of the project's core educational outputs, and it contributes directly to the WARP objectives in the following ways.

Building the capacity of VET educators and curriculum designers WARP recognises that sustainable change in VET systems requires

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more than new course materials — it requires educators who know how to design, revise, and improve curricula themselves. This unit builds exactly that capacity, equipping participants with the methodological tools to develop competence-based, sustainability-integrated curricula that outlast the project itself. **Modernising VET curriculum structures** One of WARP's central goals is to move VET programmes in Albania and Kosovo away from outdated, topic-based structures toward modern, outcome-based, modular frameworks aligned with EU standards. This unit provides the practical curriculum design methodology to make that shift — not just as a concept, but as a set of tools that participants apply directly to their own programmes. **Integrating green skills and circular economy principles at curriculum level** WARP aims to ensure that sustainability is embedded in VET education as a core professional competence — not treated as an optional extra. This unit operationalises that goal by teaching participants how to integrate the EU Waste Hierarchy, circular economy principles, and GreenComp sustainability competences into curriculum frameworks, learning outcomes, and assessment criteria. **Supporting the development of Open Educational Resources** WARP promotes the creation of educational materials that can be shared, adapted, and reused across institutions and borders. This unit develops participants' capacity to design modular, digitally structured curricula suitable for OER publication — directly supporting the project's commitment to scalable, transferable educational outputs. **Connecting education to labour-market needs and the green transition** WARP's overarching objective is to improve the relevance and quality of VET education in response to the demands of the green economy. This unit strengthens that connection by teaching participants to design curricula in partnership with employers, to align learning outcomes with real occupational profiles, and to prepare graduates for the emerging green professions that Albania and Kosovo's waste management and environmental services sectors increasingly require.

2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	Ability to understand and integrate waste management principles, environmental protection, and circular economy concepts into VET curricula. This competence includes recognising the ecological challenges facing Albania and Kosovo, understanding the EU policy frameworks that shape waste management practice, and translating environmental priorities into structured learning outcomes and curriculum components that develop genuine green skills in VET learners.
Description of the Learning Outcomes related to	Participants will be able to:

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this competence	• Identify the key ecological and sustainability challenges related to waste management in Albania and Kosovo, including low recycling rates, inadequate waste separation infrastructure, and the absence of circular economy practices • Explain the EU Waste Hierarchy (Prevention → Re-use → Recycling → Recovery → Disposal) and its implications for VET curriculum content and learning outcome design • Integrate circular economy principles — including the technical cycle and biological cycle — into VET curriculum frameworks as core competences rather than awareness topics • Define environmental and green competences as formal, assessable components of vocational programmes in waste management and related sectors • Embed sustainability objectives consistently across curriculum modules and units, ensuring that ecological responsibility is visible in learning outcomes, teaching activities, and assessment criteria throughout the whole programme
Description of the evaluation criteria	The acquisition of this competence will be verified through: • Analysis of curriculum drafts produced by participants, with specific evidence that ecological and sustainability competences are embedded as structured, assessable learning outcomes — not as standalone awareness content • Demonstration that the EU Waste Hierarchy and circular economy principles are reflected in curriculum learning outcomes, module content, and assessment tasks • Peer and trainer review of participants' curriculum designs using a published sustainability curriculum audit rubric, assessing the depth and coherence of ecological competence integration

2.2. Digital competencies

Description of the competence	Ability to use digital tools and platforms to design, structure, and document VET curricula in waste management, including the preparation of digital-ready modules and Open Educational Resources (OER) suitable for blended and online learning environments. This

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	competence includes not only the technical ability to use specific tools, but the curriculum design judgement to know which digital formats and approaches best serve different types of learning outcomes and learner needs.
Description of the Learning Outcomes related to this competence	Participants will be able to: ● Use digital tools for curriculum mapping and structuring — including collaborative whiteboards (Miro), visual design platforms (Canva), and document editing tools (Google Workspace) — to produce clear, structured curriculum documentation ● Design curriculum modules that are compatible with blended and online delivery, ensuring that learning outcomes, content, and assessment tasks are appropriate for digital learning environments ● Organise curriculum content into formats suitable for Open Educational Resources (OER), including modular structures that can be shared, adapted, and reused by other VET institutions in Albania, Kosovo, and beyond ● Integrate digital learning approaches — including interactive activities, multimedia content, and online assessment tools — into curriculum planning in a way that enhances rather than replaces meaningful learning ● Evaluate the digital readiness of an existing VET curriculum and identify specific improvements that would make it more accessible, flexible, and suitable for blended delivery
Description of the evaluation criteria	The acquisition of this competence will be verified through: ● Submission of a digitally structured curriculum module or curriculum map produced using at least one digital tool (Miro, Canva, Google Workspace, or equivalent), demonstrating that the participant can translate curriculum design thinking into a digital format ● Evidence that the submitted curriculum materials are structured in a modular, OER-compatible format — clearly organised, appropriately labelled, and suitable for adaptation by other institutions ● Peer and trainer review of the digital readiness of curriculum outputs, assessing clarity, accessibility, and suitability for blended delivery in Albanian and Kosovo VET

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	contexts

2.3. Pedagogical competencies

Description of the competence	Ability to design competence-based, outcome-oriented VET curricula that are pedagogically sound — ensuring coherence between learning outcomes, teaching methodologies, and assessment strategies in waste management and sustainability education. This competence goes beyond knowing curriculum design theory: it means being able to make deliberate, evidence-informed pedagogical choices that result in curricula where learners genuinely develop the professional competences they need, rather than simply covering prescribed content.
Description of the Learning Outcomes related to this competence	Participants will be able to: ● Apply backward design principles to VET curriculum development — starting from clearly defined learning outcomes and competences, then designing assessment tasks, and finally selecting teaching methods and content that develop those outcomes ● Ensure constructive alignment in curriculum design, so that learning outcomes, teaching and learning activities, and assessment tasks all work together toward the same professional competences ● Write strong, competence-based learning outcomes using the ABCD formula (Audience, Behaviour, Condition, Degree), producing outcomes that are specific, observable, measurable, and directly linked to real vocational practice ● Apply learner-centred and project-based pedagogical approaches at curriculum level — designing programmes where learners actively apply knowledge in realistic professional contexts rather than passively receiving information ● Evaluate the pedagogical quality of an existing VET curriculum, identifying misalignments between outcomes, teaching methods, and assessment, and proposing specific, evidence-based improvements

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	• Adapt curriculum designs to different VET institutional contexts in Albania and Kosovo, taking into account available resources, learner profiles, and national qualification framework requirements
Description of the evaluation criteria	The acquisition of this competence will be verified through: • Evaluation of curriculum coherence in participants' final products — specifically, whether learning outcomes, teaching activities, and assessment tasks are genuinely aligned or whether significant misalignments remain • Assessment of the quality of learning outcomes produced by participants, using the ABCD formula as an evaluation standard: are outcomes specific, observable, measurable, and linked to real professional tasks? • Peer review and trainer feedback on the pedagogical quality of participants' curriculum designs, using a structured rubric that assesses backward design, constructive alignment, learner-centredness, and suitability for the Albanian and Kosovo VET context

3. Learning outcomes

By the end of this course, students should be able to:

	Knowledge	**Skills**	**Competences**
LO1	Understand the principles of competence-based curriculum design in VET, including the structure and components of a complete curriculum (learning outcomes, competences, content, teaching methods, and assessment), the concept of constructive alignment, and the relevance of the EU Waste Hierarchy and circular economy frameworks for vocational education in waste	Apply backward design and constructive alignment methodologies to structure VET programmes and modules related to waste management and sustainability — starting from clearly defined learning outcomes and working through assessment design to the selection of teaching methods and content.	• Design a structured, competence-based curriculum framework for waste management education that integrates ecological sustainability, aligns with national VET standards and EU frameworks, and responds to real labour-market needs in Albania and Kosovo.

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	management.		
LO2	Understand circular economy principles — including the technical and biological cycles, the Ellen MacArthur Foundation framework, and the EU Circular Economy Action Plan — and explain their relevance to vocational education, green skills development, and labour-market needs in the waste management sector in Albania and Kosovo.	Translate circular economy and sustainability principles into specific, measurable learning outcomes and curriculum components, embedding them as core professional competences across VET programmes rather than treating them as standalone awareness topics.	Integrate environmental and green competences consistently and systematically across VET curricula in response to sectoral demands, emerging green professions, EU policy priorities, and the specific environmental challenges facing Albania and Kosovo.
LO3	Understand the relationship between learning outcomes, teaching methodologies, and assessment strategies in competence-based VET curricula — including the concept of authentic assessment and the role of self-assessment and peer assessment in developing professional competence and metacognitive skills.	Design coherent VET curricula that demonstrate full constructive alignment — where learning outcomes, teaching and learning activities, and assessment tasks all work together to develop the same professional competences in waste management and sustainability education.	Develop outcome-oriented, learner-centred VET curricula that support effective teaching, authentic assessment, and successful institutional implementation in Albanian and Kosovo VET institutions, contributing to the professional development of educators and the green transition of the workforce.

4. Teaching contents of the Unit *(the following are proposals for the content of the unit)*

Module 1: Curriculum Development for Waste Management Education			
Module number & title	**Content type**	**Content development**	**Notes**
1.*****	Paragraph/Heading	What is a VET Curriculum — and Why Does It Matter for Waste Management Education?	Main content of the unit

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1.1.	Paragraph/Subheading	From Topics to Competences: The Foundations of Competence-Based Curriculum Design	Main content of this part of the unit
1.1.	Paragraph	Imagine two VET programmes in waste management. The first lists topics: "Lesson 1 — Types of waste. Lesson 2 — Recycling processes. Lesson 3 — Environmental legislation." The second starts from a completely different question: *"What must a graduate actually be able to DO in a waste management workplace?"* — and builds everything around the answer. The second approach is called Competence-Based Education (CBE), and it is the foundation of effective VET curriculum design. A VET curriculum is not a list of topics. It is a complete educational plan that answers four fundamental questions: WHY — What professional and social need does this programme respond to? Why does it exist? WHAT — What will learners know, be able to do, and value by the end of the programme? HOW — What teaching methods, activities, and learning experiences will develop these outcomes? HOW WELL — How will we verify that learners have genuinely achieved the intended outcomes — and not simply attended the classes? When all four questions are answered — and when the answers work together — the curriculum has what educators call constructive alignment:	Explanation of this main content

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		what is taught, how it is taught, and how it is assessed all point toward the same professional competences. In Albania and Kosovo today, most VET programmes in waste management and environmental services answer only the first question partially, and rarely get to the fourth at all. Learning outcomes are vague or absent, teaching relies heavily on lectures, assessment measures memorisation rather than competence, and sustainability is treated as a one-day awareness session rather than a professional value developed across the whole programme. This module will change that. By the end of this unit, you will have the tools to design VET curricula that genuinely prepare graduates for the green economy — curricula where every lesson, every activity, and every assessment task serves a clear professional purpose.	
	Note	In Albania, less than 10% of municipal solid waste is currently recycled — well below the EU target of 55% by 2025. Kosovo faces similar challenges. Both countries have made EU integration commitments that require significant progress in sustainable waste management. The VET system is one of the most powerful tools available to drive this change — but only if curricula are designed to develop real, applicable professional competences, not just topic knowledge. This is the challenge this unit responds to.	
	Columns	**The Traditional Curriculum (Topic-Based)** Organised around subjects and topics. Asks: "What shall we teach?" Content is selected because it has always been taught, not because it develops specific professional competences. Assessment tests whether content was covered — typically through written exams measuring factual recall. Result: graduates who can describe waste management theory but struggle to perform in real workplaces.	

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<table>
<tr><td></td><td></td><td>The Competence-Based Curriculum
Organised around outcomes and competences. Asks: "What must learners be able to DO by the end?" Content, teaching methods, and assessment are all selected because they serve the development of specific, measurable professional competences.
Result: graduates who can apply knowledge in real professional contexts — conducting waste audits, designing separation systems, advising employers on sustainability compliance.</td><td></td></tr>
<tr><td></td><td></td><td>The Green VET Curriculum
Integrates sustainability as a cross-cutting professional competence — not a standalone awareness topic. Ecological responsibility, circular economy skills, and green professional values are embedded in learning outcomes, teaching activities, and assessment criteria across every relevant module of the programme.
Result: graduates who are genuinely prepared for green economy jobs and who carry environmental responsibility into every workplace they enter.</td><td></td></tr>
<tr><td></td><td>Table</td><td>
<table>
<tr><td>Curriculum element</td><td>What it means</td><td>Example in Waste Management VET</td></tr>
<tr><td>Learning outcomes</td><td>A specific, observable statement of what the learner will be able to do by the end of a module or programme. Written from the learner's perspective using action verbs.</td><td>"Using EU waste classification guidelines, the learner will conduct a waste audit for a small</td></tr>
</table>
</td><td></td></tr>
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				business, document all waste streams, and propose an evidence-based waste reduction strategy."		
		Competences	The integrated combination of knowledge, skills, and professional attitudes that a learner applies in real vocational situations. Goes beyond knowing — it means being able to perform.	Environmental responsibility: consistently applying waste hierarchy principles in professional decision-making and recommending sustainable practices to employers and colleagues.		
		Teaching method	The approach used to help learners develop the intended competence. In CBE, methods are chosen because they develop specific outcomes — not because they are convenient.	Project-based learning: learners design a real waste management plan for their own institution, applying waste audit tools, classification		

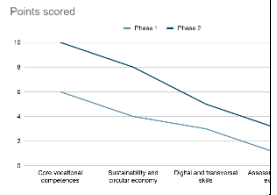
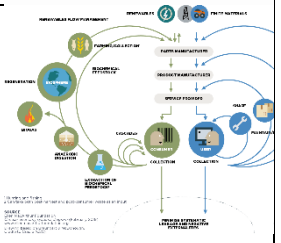
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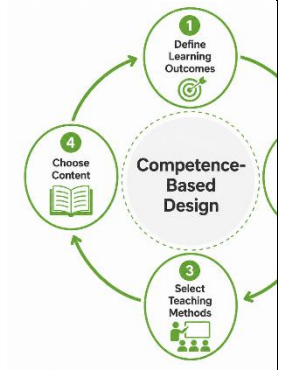
				guidelines, and circular economy principles.	
		Assessment task	The task learners must perform to demonstrate that they have achieved the learning outcome. In CBE, assessment must be authentic — it must resemble real professional practice.	Learners submit and present a complete waste management plan for a real local business, evaluated against a published rubric shared with learners before the assessment.	
	Divider	By default, dividers are labeled as CONTINUE, but you can customize this label as needed.			
2.	Statement	"A curriculum that cannot answer the question *'What will graduates actually be able to DO?'* is not a curriculum — it is a reading list. Competence-based design puts that question at the centre of everything."			
3.	List	**Start from outcomes, not topics.** Before selecting any content or teaching method, define exactly what learners should be able to do by the end of the programme. Everything else follows from this. **Use backward design.** Once outcomes are defined, design the assessment tasks that will verify them. Only then select the content and teaching methods that will prepare learners to succeed in those assessments. **Embed sustainability throughout.** Waste management and circular economy competences should appear in learning outcomes, teaching activities, and assessment criteria across the whole curriculum — not confined to a single module or awareness session.			Use a bulleted list

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		Ensure constructive alignment. Check that what is taught, how it is taught, and how it is assessed all point toward the same competences. If a learner is being taught one thing, practised on another, and assessed on a third — the curriculum is misaligned. **Design for the labour market.** Involve employers and sector representatives in curriculum design. Graduates must meet the competence needs of real workplaces in the waste management and environmental services sectors — not the assumptions of curriculum designers working in isolation.	
4.	Chart	**Distribution of curriculum focus areas in a waste management VET programme:** • Core vocational competences = 40% • Sustainability and circular economy competences = 30% • Digital and transversal skills = 20% • Assessment and self-evaluation = 10%	Use a line chart 
5. Image	Image	*The EU Waste Hierarchy — five levels from Prevention (most environmentally preferred) to Disposal (last resort). Every VET curriculum in waste management should develop learner competences at each level of this hierarchy. Source: EU Waste Framework Directive 2008/98/EC as amended 2018.*	
5. Image	Image	The Circular Economy Butterfly Diagram — showing the two main cycles: the Technical Cycle (reuse, repair, remanufacture, recycle) and the Biological Cycle (composting, anaerobic digestion). In a circular economy, materials are kept in use for as long as possible — waste becomes a resource, not a problem. VET curricula in waste management should develop learners' ability to identify opportunities at every stage of both cycles	
5. Image	Image	*One of the most practical tools for writing strong learning outcomes is the **ABCD formula**. Every learning outcome in a competence-based curriculum should specify four elements:*	The ABCD formula — a practical tool for writing specific,

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		A — Audience *Who will demonstrate the outcome? "The learner will…"* ***B — Behaviour*** *What observable action will the learner perform? Use specific action verbs — design, conduct, analyse, evaluate, propose — never vague verbs like "understand" or "know." "…conduct a waste audit…"* ***C — Condition*** *Under what circumstances? Using what tools, resources, or context? "…using EU waste classification guidelines…"* ***D — Degree*** *To what standard? How well must the learner perform? "…documenting all waste streams with no omissions, in compliance with Albanian environmental legislation."* ***Full example:*** ❌ *Weak: "Learners will understand waste separation."* ✅ *Strong: "Using EU waste classification guidelines, the learner will conduct a waste audit for a small business, document all waste streams, and propose an evidence-based waste reduction strategy."*	measurable, competence-based learning outcomes for VET programmes. 
5. Image	Image	The competence-based curriculum design cycle: Start with Learning Outcomes → Design Assessment → Select Teaching Methods → Choose Content. Every decision in curriculum design should serve the learning outcomes defined at the start. The Sustainability Integration Matrix — a practical tool for mapping which sustainability competences are addressed in which modules of a VET programme. Green = competence covered; Amber = gap identified; White = not applicable. GreenComp — the European Sustainability Competence Framework (European Commission, 2022). Four areas: Embodying sustainability values / Embracing complexity / Envisioning sustainable futures / Acting for sustainability. Free download: publications.jrc.ec.europa.eu/repository/handle/JRC128040	Carousel with 3 images 

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5. Image	Image	1. *Waste prevention in practice: designing workplace systems that generate less waste from the start. Prevention is the highest priority in the EU Waste Hierarchy — and the most valuable competence a VET graduate can bring to an employer.* 2. *Circular economy in the workplace: keeping materials in use through re-use, repair, and recycling. VET graduates who understand circular economy principles can help employers reduce costs, comply with EU regulations, and contribute to Albania's green transition.* 3. *VET educators applying curriculum design tools in a collaborative workshop. Competence-based curriculum design is not a solo activity — it requires peer review, stakeholder input, and continuous improvement.*	3 column grid 
6. Video & audio	Video	What is the Circular Economy? — Ellen MacArthur Foundation (~4 min) This video introduces the circular economy concept — the shift from a linear	Explaining the Circular Economy and How Society

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		"take, make, dispose" model to a regenerative system where materials are kept in use for as long as possible. As a VET curriculum designer, understanding the circular economy is essential: it defines the professional competences your graduates will need in the waste management and environmental services sectors for the next decade.	Can Re-think Progress | Animated Video Essay
6. Video & audio	Video	Waste Management and the Circular Economy — VET and Professional Training Context (~6 min) **Transkript/Caption:** This video explores how waste management connects to circular economy principles in real professional contexts — including vocational education and training. Watch with this question in mind: which of the competences shown in this video are currently developed in the VET programmes you work with — and which are missing? Use your observations to inform the curriculum design work in the activities that follow.	Circular Economy: Rethinking Waste and Resources (21 Minutes)
6. Video & audio	Audio	Welcome to Module 11: Curriculum Development for Waste Management Education. This module is designed for VET educational designers, curriculum developers, and senior trainers who want to build vocational programmes that genuinely prepare graduates for the green economy. In the lessons that follow, you will learn how to design competence-based curricula that embed waste management and sustainability as core professional competences — not as isolated awareness topics. You will work with practical tools including backward design, the ABCD learning outcome formula, the EU Waste Hierarchy, and the circular economy framework. By the end of this module, you will be able to design, evaluate, and improve VET curricula in your own institution — curricula where every lesson, every activity, and every assessment task serves a clear professional purpose and prepares graduates for real green economy jobs in Albania and Kosovo.	ElevenLabs_2026-05-13T09_45_01_Rachel - Confident & Friendly_pvc_sp100_s50_sb75_se0_b_m2.mp3

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		Let's begin.	
7. Files	File	The EU Circular Economy Action Plan (2020) is the key European policy document shaping waste management, recycling, and sustainability standards across EU member states and candidate countries including Albania and Kosovo. As a VET curriculum designer, this document is an essential reference for aligning your curriculum learning outcomes with European sustainability priorities. Download and keep it as a reference throughout this module.	cellar_9903b325-6388-11ea-b735-01aa75ed71a1.0017.02_DOC_2.pdf
8. Accordion and tabs	Accordion	**Tab 1:** **Header:** What makes a learning outcome "competence-based"? **Text:** A competence-based learning outcome is not a topic and not an activity — it is a precise statement of what the learner will be able to DO in a real professional context. The difference matters enormously in practice. Compare these three examples: ❌ **Topic:** *"Waste separation methods"* This is a subject to be covered — not an outcome. It tells us what the teacher will teach, not what the learner will be able to do. ❌ **Activity:** *"Learners will attend a workshop on waste separation."* This describes what learners will do during the course — not what they will be able to do as a result of it. ✅ **Competence-based outcome:** *"Given a mixed waste sample of 20 items, the learner will correctly classify each item into the appropriate waste category — organic, recyclable, residual, or hazardous — in accordance with Albanian environmental legislation, with no more than 2 errors."* This is specific, observable, measurable, and directly linked to a real professional task. The test is simple: **can you observe and assess whether the learner has achieved it?** If yes — it is a competence-based outcome. If no — rewrite it using the ABCD formula.	

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	Accordion	**Tab 2:** **Header:** What is constructive alignment — and why does it matter? **Text:** Constructive alignment is the principle that three elements of a curriculum must work together toward the same professional competences: **1. Learning outcomes** — what the learner should be able to do **2. Teaching and learning activities** — experiences that develop that ability **3. Assessment tasks** — tasks that verify whether the ability has been achieved When these three are misaligned, the curriculum fails its learners — even if individual lessons are well delivered. **Example of a misaligned curriculum:** ● Learning outcome: *"Learners will design a workplace waste management plan"* ● Teaching method: *"Lectures on waste legislation theory"* ● Assessment: *"30-question multiple choice exam on waste types"* In this example, learners are being taught theory, but assessed on factual recall — and neither connects to the outcome of designing a plan. The curriculum is broken. **The same curriculum — constructively aligned:** ● Learning outcome: *"Learners will design a workplace waste management plan"* ● Teaching method: *"Collaborative workshop — learners design a real plan for a local business"* ● Assessment: *"Submit and present a complete waste management plan, evaluated against a published rubric shared with learners before the task begins"* Now everything points in the same direction. Learners know exactly what is expected, and the assessment directly verifies the competence the outcome	

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		describes.	
	Tab	TAB 2 Write header Write text/description	
9. Labeled graphic	Labeled graphic	**Marker 1:** **Prevention — Level 1 of the EU Waste Hierarchy** Prevention is the most environmentally preferred option — and the most valuable competence a VET graduate can bring to an employer. It means designing processes, systems, and behaviours that generate less waste in the first place. Example learning outcome: *"Analyse a production or service process and identify at least three specific waste prevention opportunities, proposing practical measures to reduce waste generation at source."*	
		Marker 2: **Recycling — Level 3 of the EU Waste Hierarchy** Recycling means reprocessing waste materials into new products — paper, glass, metals, plastics, compost. Effective recycling depends entirely on correct waste separation at source. In Albania, the recycling rate is currently below 10% — well below the EU target of 55% by 2025. Example learning outcome: *"Design a waste separation system for a VET institution, specifying the correct containers, labelling, and collection procedures for each waste stream in accordance with Albanian environmental legislation."*	
		Marker 3: **Circular Economy Competence** Beyond the waste hierarchy, circular economy thinking requires learners to consider the full life cycle of materials and products — from design and production through use, repair, and end-of-life management. The goal is to keep materials in use for as long as possible and regenerate natural systems.	

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		Example learning outcome: *"Map the life cycle of a selected product and identify at least three circular economy intervention points, applying the Ellen MacArthur Foundation framework and proposing specific actions a VET institution or employer could take at each point."*	
		Marker 4: **GreenComp — The EU Sustainability Competence Framework** GreenComp (European Commission, 2022) defines the sustainability competences that all learners — in VET and beyond — should develop. It organises these into four areas: • Embodying sustainability values • Embracing complexity • Envisioning sustainable futures • Acting for sustainability VET curriculum designers should embed at least one GreenComp competence area in every module of a waste management programme. Free download: publications.jrc.ec.europa.eu/repository/handle/JRC128040	
10.Scenario	Scenario	**Slide 1:** **Character:** Arjola, 38 years old, VET curriculum coordinator at an environmental services training centre in Tirana. She has 10 years of teaching experience but has never received formal training in competence-based curriculum design. **Background:** A training room with whiteboards covered in curriculum maps, sticky notes, and sustainability diagrams. **Instructions:** Arjola's institution has been asked by the Ministry of Education to revise its waste management VET curriculum to align with EU green skills standards — within 3 months. She must make a series of critical curriculum design decisions. Help her make the right choices. Each correct decision unlocks the next stage of the redesign process.	
		Slide 2	

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		Arjola's current learning outcome reads: "Learners will understand waste separation." Her manager says it is too vague to assess. What should she do? A) Keep it — it covers the topic and everyone understands what it means. B) Rewrite it using ABCD: "Given 20 mixed waste samples, learners will classify each item into the correct waste category per Albanian legislation, with no more than 2 errors." ✓ C) Delete it — waste separation is already covered in another module.	
		Slide 3: Excellent work! Arjola chose option B — and made exactly the right decision. Her revised learning outcome is now specific, observable, and directly linked to a real professional task. It tells learners exactly what they need to be able to do, under what conditions, and to what standard. With this foundation in place, Arjola can now design an assessment task that directly tests the competence — and select teaching activities that prepare learners to succeed in it. Arjola's institution is on its way to delivering a waste management VET programme that genuinely prepares graduates for green economy jobs in Albania. Well done for guiding her there.	
11.Timeline	Timeline	**Date 1: 2008** The EU Waste Framework Directive (2008/98/EC) is adopted, establishing the five-level waste hierarchy — Prevention, Preparing for Re-use, Recycling, Recovery, and Disposal — as the legally binding framework for waste management across Europe. Albania and Kosovo begin aligning their national environmental legislation with this framework as part of their EU integration commitments. For VET curriculum designers, this directive defines the professional knowledge base that all waste management graduates must develop.	

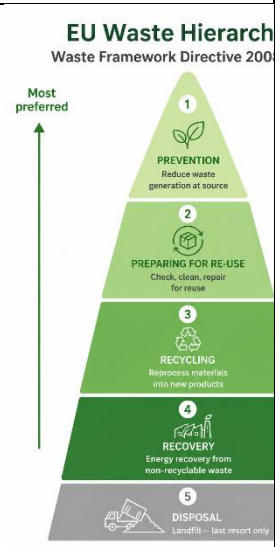
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		Date 2: 2015 The UN 2030 Agenda for Sustainable Development is adopted, introducing the 17 Sustainable Development Goals (SDGs). SDG 4 (Quality Education), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action) directly shape the competences that VET programmes in waste management and sustainability must develop. For the first time, education systems worldwide are asked to align their curricula with global sustainability goals.	
		Date 3: 2019 The European Green Deal is launched — the EU's strategy to become the world's first climate-neutral continent by 2050. The Green Deal sets ambitious targets for waste reduction, recycling rates, circular economy integration, and green skills development across all sectors, including vocational education and training. Western Balkans countries, including Albania and Kosovo, are encouraged to align their national strategies with Green Deal priorities as part of their EU accession process. **Date 4: 2020** The EU Circular Economy Action Plan II is launched as a core pillar of the European Green Deal. It sets binding targets for recycling rates, sustainable product design, and circular economy integration across industries and institutions. VET systems are identified as key contributors to building the green workforce needed to deliver the circular economy in practice. **Date 5: 2022** The European Commission publishes GreenComp — the European Sustainability Competence Framework — defining the sustainability competences that all learners should develop through education and training. GreenComp provides VET curriculum designers with a clear, EU-endorsed framework for embedding sustainability as a structured, assessable competence — not just an awareness topic.	

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12.Flashcards	Flashcards	**Flashcard 1:** **Front**: *What is constructive alignment?* **Back**: The principle that three elements of a curriculum must work together toward the same professional competences: **(1) Learning outcomes** — what the learner should be able to do; **(2) Teaching and learning activities** — experiences that develop that ability; **(3) Assessment tasks** — tasks that verify whether the ability has been achieved. When these three are misaligned, the curriculum fails its learners — even if individual lessons are well delivered. Named by educational theorist John Biggs.	
		Flashcard 2: **Front:** *(Image: EU Waste Hierarchy pyramid — 5 levels* **Back:** Level 1 — Prevention (most preferred): Reduce waste generation at source Level 2 — Preparing for Re-use: Check, clean, repair products for reuse Level 3 — Recycling: Reprocess materials into new products Level 4 — Recovery: Energy recovery from non-recyclable waste Level 5 — Disposal (last resort): Landfill or incineration without energy recovery Source: EU Waste Framework Directive 2008/98/EC as amended 2018.	
		Flashcard 3: **Front**: *What does the ABCD formula stand for in learning outcome design?* **Back:**	

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		A — Audience: Who will demonstrate the outcome? (*"The learner will…"*) **B — Behaviour:** What observable action will the learner perform? (*"…conduct a waste audit…"*) **C — Condition:** Under what circumstances or using what tools? (*"…using EU waste classification guidelines…"*) **D — Degree:** To what standard of performance? (*"…documenting all waste streams with no omissions, in compliance with Albanian environmental legislation."*) ❌ Weak: *"Learners will understand waste separation."* ✅ Strong: *"Using EU guidelines, learners will conduct a waste audit, document all waste streams, and propose a reduction strategy."*	
13. Multiple choice and multiple response	Multiple choice	**Question:** Which of the following is a correctly written competence-based learning outcome? **Answer 1:** Learners will understand the principles of waste management and circular economy. **Feedback:** Incorrect. "Understand" is not an observable, measurable action — you cannot directly assess whether someone "understands" something. A competence-based learning outcome must describe a specific action the learner will visibly perform in a real professional context. **Answer 2:** The course covers waste types, recycling processes, and EU environmental legislation. **Feedback:** Incorrect. This describes course content — what the teacher will cover — not a learner outcome. It answers the question "what will be taught?" not "what will learners be able to do as a result?" **Answer 3:**	***Correct answer: Answer 4***

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		Learners will attend a site visit to a local recycling facility and write a reflection report. **Feedback:** Incorrect. This describes a learning activity — what learners will do during the course — not what they will be able to do as a result of completing the programme. Activities are part of the "HOW" of curriculum design, not the "WHAT." **Answer 4:** Using EU waste classification guidelines, learners will conduct a waste audit for a small business, document all waste streams, and propose an evidence-based waste reduction strategy. **Feedback:** Correct. This outcome specifies the observable action (conduct a waste audit), the condition (using EU waste classification guidelines), the context (a small business), and the expected output (documented audit and reduction strategy). It is specific, measurable, and directly linked to a real professional task in the waste management sector.	
13. Multiple choice and multiple response	Multiple answer	**Question:** Which of the following are characteristics of a well-designed, competence-based VET curriculum in waste management? Select all that apply. **Answer 1:** It is organised around clearly defined learning outcomes that describe what learners will be able to do — not around a list of topics to be covered. **Feedback:** Correct. Competence-based curricula start from outcomes — what learners will be able to do in real professional contexts — and build content, teaching methods, and assessment around them. Topics serve outcomes, not the other way around. **Answer 2:**	***Correct answers: 1, 2, 4***

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		Sustainability and circular economy competences are embedded across all relevant modules as cross-cutting professional competences — not confined to a single awareness session. **Feedback:** Correct. In a well-designed green VET curriculum, sustainability is visible in learning outcomes, teaching activities, and assessment criteria throughout the whole programme. Treating it as a standalone topic produces graduates who do not carry environmental responsibility into their professional practice. **Answer 3:** The curriculum is measured exclusively through written exams at the end of each module, testing learners' knowledge of waste management theory. **Feedback:** Incorrect. Written exams alone cannot verify whether learners can perform professional competences in real contexts. Competence-based assessment requires authentic tasks — projects, practical demonstrations, portfolios, case study analyses — that directly test whether learners can do what the learning outcomes require. **Answer 4:** Teaching methods are selected because they develop the specific competences defined in the learning outcomes — not because they are convenient or familiar. **Feedback:** Correct. In a constructively aligned curriculum, every teaching method serves a specific learning outcome. If the outcome requires learners to design a waste management plan, the teaching method should involve actually designing one — not listening to a lecture about how plans are designed. **Answer 5:** The curriculum covers as many topics as possible to give learners a broad	

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		general knowledge of environmental issues. **Feedback:** Incorrect. Breadth of topic coverage is not a measure of curriculum quality. A competence-based curriculum is deliberately focused — it includes only the content that serves the development of the defined professional competences. More topics does not mean more learning.	
14. Matching and fill in the blank	Matching	**Instructions for the student:** Match each curriculum design term on the left with its correct definition on the right. **Matches:** Learning outcome → A specific, observable statement of what the learner will be able to do by the end of a module or programme, written using an action verb and linked to a real professional task. Competence → The integrated combination of knowledge, skills, and professional attitudes that a learner applies in real vocational situations — going beyond knowing to actually being able to perform. Constructive alignment → The principle that learning outcomes, teaching and learning activities, and assessment tasks all work together toward the same professional competences. When one changes, the others must be reviewed. Waste hierarchy → The EU framework established by the Waste Framework Directive 2008/98/EC that ranks waste management strategies in order of environmental preference — from Prevention (most preferred) to Disposal (last resort). Backward design → A curriculum design approach that starts from the desired learning outcomes, then designs assessment tasks that verify those outcomes, and finally selects the teaching methods and content that will develop them.	
14. Matching	Fill in the blank	**Sentence 1:**	*Missing word 1:*

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and fill in the blank		"A competence-based curriculum starts from the desired _____ and works backward to determine what content and teaching methods are needed to achieve them." **Sentence 2:** "In the EU Waste Hierarchy, _____ is the most environmentally preferred option — meaning that the best waste is the waste that is never generated in the first place." **Sentence 3:** "Constructive alignment means that learning outcomes, teaching methods, and _____ all work together toward the same professional competences." **Sentence 4:** "Sustainability in VET should be treated as a _____ competence — embedded across the whole curriculum, not confined to a single awareness session."	**outcomes,** *Missing word 2:* **prevention,** *Missing word 3:* **assessment,** Missing word 4: **cross-cutting**

5 Activities (examples)

Module 1: Curriculum Development for Waste Management Education — Activities			
Module number & title	**Activity type**	**Activity development**	**Notes**
Flashcards	Flashcards	**Flashcard 1:** **Front**: *(Image: Curriculum design cycle diagram)* **Back**: A VET curriculum answers four questions: **WHY** (purpose), **WHAT** (learning outcomes), **HOW** (teaching methods), **HOW WELL** (assessment). In competence-based design, you start from WHAT and work backward — this is called backward design.	

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Flashcards	Flashcards	**Flashcard 2:** **Front:** *(Image: EU Waste Hierarchy pyramid)* **Back:** Five levels from most to least preferred: Prevention → Preparing for Re-use → Recycling → Recovery → Disposal. Every VET curriculum in waste management should develop learner competences at each level — starting from Prevention, not Disposal.	
Flashcards	Flashcards	**Flashcard 3:** **Front:** *"What is the difference between a learning outcome and a learning activity?"* **Back:** A **learning activity** is what learners DO during the course (attend a workshop, watch a video, visit a facility). A **learning outcome** is what learners can DO as a result of completing the course (design a waste audit, propose a circular economy strategy, evaluate a curriculum for sustainability integration).	
Multiple choice and multiple response	Multiple choice	**Question:** What is the most important first step in backward design when developing a VET curriculum? **Answer 1:** Selecting the textbooks, videos, and teaching materials that will be used in the programme. **Feedback:** Incorrect. Selecting materials is the last step in backward design — not the first. Materials serve the learning outcomes and assessment tasks, which must be defined first. Starting with materials is one of the most common mistakes in curriculum design. **Answer 2:** Deciding how many hours and sessions the programme will last.	**Answer 3**

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		Feedback: Incorrect. Duration is a practical constraint, not a starting point for curriculum design. A programme can be any length — what matters is whether the time available is used to develop the right competences. Duration decisions come after outcomes and assessment are defined. **Answer 3:** Clearly defining the learning outcomes and professional competences that learners should achieve by the end of the programme. **Feedback:** Correct. Backward design always begins with the question: "What must learners be able to DO by the end?" Once learning outcomes and competences are clearly defined, you can design assessment tasks that verify them (Step 2) and select teaching methods and content that develop them (Step 3). Everything in the curriculum flows from this first step. **Answer 4:** Planning the schedule of lessons and deciding which topics will be covered in each session. **Feedback:** Incorrect. Planning lesson schedules and topic sequences is a topic-based approach — not a competence-based one. In backward design, lesson planning comes after outcomes, assessment, and teaching methods have all been defined. Topics are chosen because they serve outcomes — not the other way around.	
Multiple choice and multiple response	Multiple answer	**Question:** Which of the following are examples of authentic assessment tasks in a waste management VET programme? Select all that apply. **Answer 1:** Learners conduct a real waste audit of their VET institution, document all waste streams using standard EU classification guidelines, and present their findings	***Correct answers: 1, 3, 4***

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		and recommendations to institutional management. **Feedback:** Correct. This is a highly authentic assessment task — it requires learners to perform a real professional activity (waste audit) in a real context (their own institution), using real tools (EU classification guidelines), and communicating results to a real audience (management). It directly verifies the competence the learning outcome describes. **Answer 2:** Learners complete a 40-question multiple choice exam testing their knowledge of waste types, recycling processes, and EU environmental legislation. **Feedback:** Incorrect. A multiple choice exam tests factual recall — not the ability to perform professional tasks. It can be a useful formative assessment tool, but it cannot verify whether learners can actually conduct a waste audit, design a separation system, or apply circular economy principles in a real workplace context. **Answer 3:** Learners design a complete waste management plan for a real local business, including waste stream identification, separation system design, staff guidance, and a monitoring schedule — and present it to the business owner for feedback. **Feedback:** Correct. This task is authentic because it places learners in a real professional situation, requires them to apply multiple competences simultaneously, and involves a real stakeholder (the business owner) in the assessment process. It directly mirrors what a waste management professional would be asked to do in the workplace. **Answer 4:**	

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		Learners analyse an existing VET curriculum for a waste management programme, identify gaps in sustainability integration using the Sustainability Integration Matrix, and propose specific, evidence-based improvements. **Feedback:** Correct. This task is authentic for the specific audience of this module — VET curriculum designers. It requires learners to apply the tools and frameworks developed throughout the module to a real curriculum design challenge, producing a concrete output that could be used in their own institution. **Answer 5:** Learners write a 1,000-word essay describing the importance of circular economy principles for sustainable development in Albania. **Feedback:** Incorrect. An essay on the importance of circular economy tests writing and argumentation skills — not the ability to apply circular economy principles in professional practice. It may develop useful transversal competences, but it is not an authentic assessment of waste management vocational competence.	
Matching and fill in the blank	Matching	**Instruction for students:** Match each assessment method on the left with the competence it is best suited to verify on the right. **Matches:** **Portfolio** → Demonstrates competence development over time — learners collect evidence of their curriculum design work across the whole module, showing progression from initial drafts to final products. **Practical demonstration** → Verifies that learners can perform a specific professional skill in a real or simulated context — for example, conducting a waste audit or facilitating a curriculum review session. **Project** → Requires learners to apply multiple competences simultaneously to solve a real or realistic professional problem — for example, designing a complete waste management VET curriculum module from scratch.	

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		Case study analysis → Tests learners' ability to analyse a real situation critically and apply theoretical frameworks — for example, evaluating an existing VET curriculum using the Sustainability Integration Matrix. **Peer review** → Develops learners' ability to give and receive structured, criteria-based feedback on curriculum design quality — an essential professional competence for VET educators working in collaborative institutional contexts.	
Matching and fill in the blank	Fill in the blank	**Sentence 1:** "Authentic assessment requires learners to perform real or realistic _____ tasks — not just recall information in a written exam." **Sentence 2:** "The Sustainability Integration Matrix helps curriculum designers identify _____ — modules where sustainability competences are absent but should be developed." **Sentence 3:** "In a competence-based curriculum, teaching methods are selected because they develop specific _____ — not because they are convenient or familiar." **Sentence 4:** "A VET curriculum that embeds sustainability as a _____ competence ensures that environmental responsibility is visible in learning outcomes, teaching, and assessment across the whole programme."	Missing word 1: **professional** Missing word 2: **gaps** Missing word 3: **competences** missing word 4**:** **cross-cutting**
Digital map	Digital map	Design Your Own Sustainability Integration Matrix **Instruction:** Using Miro, Canva, or Google Sheets, create a Sustainability Integration Matrix for a VET programme you are currently working with or are familiar with. Your matrix should: **Step 1 — List the modules:** In the first column, list all the modules of the VET programme you have chosen (minimum 4 modules). **Step 2 — List the sustainability competences:** Across the top row, list the key	

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		sustainability competences relevant to waste management and circular economy (minimum 4 competences — for example: Waste Hierarchy Knowledge, Circular Economy Principles, Environmental Responsibility, Waste Audit Skills). **Step 3 — Map the current situation:** For each cell in the matrix, indicate whether the competence is currently: 🟢 **Covered** — the competence is addressed as a structured, assessable learning outcome 🟡 **Partially covered** — the competence is mentioned but not embedded as a formal learning outcome 🔴 **Gap** — the competence is absent from this module entirely ☐ **Not applicable** — this competence is not relevant to this module **Step 4 — Identify priorities:** Based on your matrix, identify the three most critical gaps — the sustainability competences that are most urgently needed but currently absent from the curriculum. **Step 5 — Propose improvements:** For each of the three priority gaps, write one new competence-based learning outcome (using the ABCD formula) that would address the gap if added to the relevant module. **Output:** A completed digital Sustainability Integration Matrix with three proposed new learning outcomes. Share your matrix with a peer for structured feedback before final submission.	
Design of a small waste-separation system within the institution		Design a Waste Separation System for Your Institution **Instruction:** Working in pairs, design a complete waste separation system for your own VET institution — or for the institution described in the case study provided by your trainer. Your design must include: **Step 1 — Waste Audit:** Conduct or simulate a brief waste audit of the institution. Identify the main waste streams generated (organic, recyclable paper, recyclable plastic/glass/metal, residual, hazardous). Estimate the approximate	

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		volume of each stream per week. **Step 2 — System Design:** Design the waste separation system, specifying: ● The number, type, and colour of containers needed for each waste stream ● The location of collection points within the institution ● Labelling requirements in accordance with Albanian environmental legislation ● Collection frequency and logistics **Step 3 — Staff Guidance:** Draft a one-page staff guidance document explaining the new system — what to separate, where, and why. Write it for a non-specialist audience. **Step 4 — Curriculum Connection:** Write two competence-based learning outcomes (using the ABCD formula) that this activity could assess if used as part of a VET curriculum module on waste management. **Step 5 — Peer Presentation:** Present your waste separation system design to another pair. Use the following peer feedback questions: ● Is the system practical and implementable in a real institution? ● Does it comply with the EU Waste Hierarchy? ● Are the two learning outcomes specific, observable, and measurable? **Output:** A completed waste separation system design (diagram or written plan), one-page staff guidance document, and two ABCD learning outcomes.	
Hackathon	Hackathon	Hackathon: Redesign a VET Curriculum for Sustainability **Instruction:** Working in teams of 3–4, you will receive an existing VET curriculum for an environmental services or waste management programme (provided as a case study by your trainer). Your task is to redesign it to fully integrate waste management and circular economy competences — using all the tools and frameworks you have developed in this module.	

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		Stage 1 — Audit (30 minutes): Using the Sustainability Integration Matrix, audit the existing curriculum. Identify: • Which sustainability competences are currently covered, partially covered, or absent • Which learning outcomes are weak (vague, not observable, not assessable) and need rewriting • Where teaching methods and assessment tasks are misaligned with learning outcomes **Stage 2 — Redesign (45 minutes):** Redesign the curriculum, making the following specific improvements: • Rewrite at least 3 learning outcomes using the ABCD formula • Add at least 2 new sustainability competences as cross-cutting elements across multiple modules • Replace at least 1 assessment task with a more authentic alternative • Identify at least 1 digital or blended learning opportunity **Stage 3 — Present (15 minutes per team):** Present your redesigned curriculum to the full group. Your presentation must explain: • What were the three most critical problems in the original curriculum? • What specific changes did you make — and why? • How does the redesigned curriculum better prepare graduates for green economy jobs in Albania and Kosovo? • What would the next steps be if this redesign were to be implemented in a real institution? **Stage 4 — Peer Feedback:** After each presentation, the other teams provide structured feedback using this rubric: • Are the rewritten learning outcomes specific, observable, and measurable? (1–5) • Is sustainability embedded as a cross-cutting competence — not a standalone topic? (1–5)	

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		• Are the new assessment tasks authentic and aligned with the learning outcomes? (1–5) • Is the redesigned curriculum realistic and implementable in an Albanian or Kosovo VET institution? (1–5) **Output:** A redesigned curriculum document, a short presentation, and completed peer feedback forms for each team.	

6. Methodology

5.1. Project-Based Learning (PBL) and collaborative Learning	This unit uses Project-Based Learning as its primary pedagogical approach. Rather than presenting curriculum design as an abstract theory, participants work on real curriculum design challenges from the beginning — applying tools, frameworks, and methods directly to VET programmes they know or work with. Collaborative group work is central to this approach. Participants bring different institutional experiences, subject expertise, and national contexts to the table — and the exchange of these perspectives is itself a learning resource. Through collaborative projects, participants develop not only curriculum design competences but also the professional habits of peer review, constructive feedback, and shared standards that are essential for sustainable curriculum improvement in VET institutions.
5.2. Collaborative learning between institutions in Albania and Kosovo	This unit deliberately brings together VET educators and curriculum designers from different institutions in Albania and Kosovo. This cross-institutional collaboration is not incidental — it is a core part of the learning design. Participants compare their current curriculum structures, share the specific challenges they face in integrating sustainability into their programmes, and co-design improved curriculum frameworks together. This peer exchange produces

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	richer learning than any individual institution could achieve alone — and it builds the professional networks and shared standards that support long-term curriculum quality improvement across the VET sector in both countries.
5.3. Blended Learning	This unit is delivered through a blended learning approach — combining online learning activities with face-to-face workshops. Theoretical input on competence-based design principles, sustainability frameworks, and curriculum tools is delivered through the online platform (asynchronous), allowing participants to engage with content at their own pace and in their own context. Face-to-face time is reserved for the activities that benefit most from in-person interaction: collaborative curriculum design workshops, peer review sessions, the scenario activity, and the hackathon. This approach maximises the value of both online and face-to-face learning, and models the blended curriculum design approaches that participants are encouraged to apply in their own institutions.
5.4. Online and mobile Learning tools	Digital tools are integrated throughout this unit — not as technical extras, but as essential curriculum design instruments. Participants use Miro for digital curriculum mapping, Canva for visual curriculum design and infographic development, and Google Workspace for collaborative document editing and peer review. Working with these tools serves two purposes simultaneously: participants develop the digital competences needed to design OER-compatible, digitally structured curricula for their own learners — while also using those tools to complete the curriculum design tasks of this unit. Digital fluency and curriculum design competence are developed together, not separately.
5.5. Real case studies	Real case studies from VET institutions and waste management sector employers are used throughout the unit to ground curriculum design principles in authentic professional contexts. Cases include the revision of an environmental services curriculum at a Kosovo VET centre, a circular economy competence integration project at an Albanian technical school, and EU best practice examples from the Netherlands, Finland, and Germany.

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	Participants do not simply read these cases — they analyse them critically, identifying what worked, what did not, and what lessons can be transferred to their own institutional contexts. This critical engagement with real examples develops the analytical competences that curriculum designers need to evaluate and improve their own programmes continuously.
5.6. Visits to companies in the sector	Where feasible, visits to waste management companies, recycling facilities, or environmental services organisations are organised as part of this unit. These visits serve a specific curriculum design purpose: they allow participants to directly observe the competences required in real waste management workplaces — and to use those observations to inform their curriculum design decisions. Employer representatives may also be invited as guest speakers during workshops, to articulate current and emerging skill needs in the waste management and circular economy sectors. This direct engagement with industry stakeholders helps participants design curricula that are genuinely aligned with labour-market needs — not with assumptions made in isolation from the workplace.
5.7. Workshops and experiential learning	Workshops are the primary format for experiential learning in this unit. Each workshop combines a brief theoretical input with an extended hands-on curriculum design activity — ensuring that every concept introduced is immediately applied in practice. The workshop activities are carefully sequenced to build competence progressively: early workshops focus on learning outcome writing and constructive alignment; later workshops tackle sustainability integration, digital curriculum design, and authentic assessment. The hackathon activity — redesigning a real VET curriculum for sustainability integration — is the culminating experiential learning experience, requiring participants to integrate and apply everything they have developed throughout the unit.
5.8. Community based and participatory approaches	This unit encourages participants to involve local stakeholders — waste management employers, environmental NGOs, VET learner representatives, and commu-

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	nity sustainability practitioners — in their curriculum design processes. Participants are guided to conduct brief stakeholder consultations as part of their curriculum design projects, gathering input on real competence needs and community sustainability priorities. This participatory approach ensures that the curricula participants design are not developed in institutional isolation but are genuinely responsive to the communities and labour markets they serve. It also models the collaborative, stakeholder-informed curriculum development culture that sustainable VET systems require.

7. Resources

Policy and Framework Documents:

- EU Waste Framework Directive (2008/98/EC, amended 2018) — eur-lex.europa.eu
- EU Circular Economy Action Plan (2020) — ec.europa.eu/environment/strategy/circular-economy-action-plan_en
- European Green Deal (2019) — ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal
- GreenComp: The European Sustainability Competence Framework (EC, 2022) — publications.jrc.ec.europa.eu/repository/handle/JRC128040
- Osnabrück Declaration on VET (2020) — ec.europa.eu/social/main.jsp?catId=1501
- UN 2030 Agenda for Sustainable Development — sdgs.un.org/goals

Curriculum Design References:

- Cedefop: "Defining, Writing and Applying Learning Outcomes: A European Handbook" (2017) — cedefop.europa.eu/files/5506_en.pdf
- European Training Foundation: "Competence-Based VET Curriculum Development: A Practical Guide" (2021) — etf.europa.eu
- Biggs, J. & Tang, C. (2011). Teaching for Quality Learning at University. Open University Press.
- Wiggins, G. & McTighe, J. (2005). Understanding by Design. ASCD.

Waste Management and Circular Economy:

- Ellen MacArthur Foundation — Circular Economy Learning Hub: ellenmacarthurfoundation.org/education
- UNITAR — Waste Management and Circular Economy free e-learning: unitar.org/courses/waste-management-and-circular-economy-

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- Cedefop: "Skills for Green Jobs: European Synthesis Report" (2019) — cedefop.europa.eu
- European Environment Agency — waste management data and reports: eea.europa.eu

Digital Tools:
- Miro (digital curriculum mapping) — miro.com
- Canva (visual curriculum design) — canva.com
- Google Workspace (collaborative editing) — workspace.google.com
- Articulate Rise 360 (e-learning platform) — articulate.com/rise

Free Image and Media Resources:
- Freepik — freepik.com (search: "waste management", "circular economy", "sustainability")
- Unsplash — unsplash.com (search: "recycling", "green economy", "waste")
- Pixabay — pixabay.com
- European Environment Agency Media Library — eea.europa.eu/media/image-gallery

WARP Project Internal Resources:
- WARP project curriculum templates and case studies (shared via project repository)
- Module outputs developed by consortium partners (available on the WARP platform)

8. Assessment criteria

Assessment in this unit is competence-based and focuses on the practical application of curriculum design skills related to waste management and sustainability.

8.1 Use of digital tools

Participants demonstrate effective use of at least one digital tool — Miro, Canva, Google Workspace, or equivalent — to design, map, and document a VET curriculum or curriculum component.

Competent performance: The participant produces a complete digital curriculum map or module specification that is clearly structured, visually organised, and suitable for sharing with colleagues or uploading as an OER. The digital output demonstrates that the participant can translate curriculum design thinking into a digital format — not just describe it in prose.

Not yet competent: The digital output is incomplete, poorly organised, or does not demonstrate meaningful use of digital curriculum design tools beyond basic word processing.

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8.2 Understanding of the sustainability framework

Participants demonstrate understanding of the EU Waste Hierarchy, circular economy principles, GreenComp sustainability competences, and green skills frameworks — and embed these systematically into their curriculum designs as structured, assessable competences.

Competent performance: The participant's curriculum design explicitly references at least two EU sustainability frameworks, embeds sustainability as a cross-cutting competence across multiple modules, and includes at least three learning outcomes that directly address ecological, circular economy, or green skills competences. Sustainability is not confined to a single module or awareness session.

Not yet competent: Sustainability appears as a standalone topic in one module only, or is referenced in the curriculum description but not reflected in learning outcomes, teaching methods, or assessment tasks.

8.3 Ability to implement real improvements

Participants propose concrete, evidence-based curriculum improvements that enhance sustainability integration in a real or realistic VET institutional context, demonstrating alignment between labour-market needs and curriculum competences.

Competent performance: The participant identifies specific, named gaps in an existing curriculum, proposes improvements with a clear rationale linked to employer needs and EU sustainability policy, and produces revised learning outcomes and assessment tasks that directly address the identified gaps. The proposed improvements are realistic and implementable in an Albanian or Kosovo VET institution.

Not yet competent: Proposed improvements are generic, vague, or not linked to specific learning outcomes, assessment tasks, or labour-market evidence.

8.4 Final Product: curriculum framework for waste management education

The final product is a complete curriculum module specification that includes all of the following:

- At least 3 learning outcomes written in correct ABCD format, each describing a specific, observable, measurable professional competence
- A sustainability integration map showing how ecological, digital, and pedagogical competences are distributed across the module
- A description of at least 2 teaching and learning methods, with an explanation of why each method was chosen to develop the specific learning outcomes
- At least 1 authentic assessment task, with a published assessment rubric that learners would receive before the assessment
- A brief rationale explaining how the curriculum responds to labour-market needs and EU sustainability frameworks in the Albanian or Kosovo VET context

The final product is evaluated against a rubric shared with participants at the beginning of the unit.

8.5 Self- and co-assessment

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Participants complete a structured self-assessment of their curriculum design against the published criteria, and provide written peer feedback on at least one colleague's curriculum design using the sustainability curriculum audit tool.
Competent performance: The self-assessment demonstrates honest, specific critical reflection — identifying genuine strengths and specific areas for improvement, not just general positive statements. Peer feedback is criteria-referenced, constructive, and specific enough to be actionable — it tells the recipient exactly what to improve and how.
Not yet competent: Self-assessment is superficial or overly positive. Peer feedback is generic, vague, or not linked to the published assessment criteria.

9. Inclusion of the EU/transnational perspective

This unit takes an explicitly comparative EU and transnational perspective throughout — not as an add-on, but as a core dimension of the curriculum design learning experience.
Participants examine how waste management and VET curriculum practices differ across Albania, Kosovo, and EU member states. They compare national waste management policies, recycling rates, VET qualification frameworks, and approaches to sustainability integration — identifying the gaps between current Albanian and Kosovo practice and EU standards, and understanding the policy commitments that make closing those gaps both necessary and urgent.
Three EU member states are used as comparative reference points throughout the unit:
The Netherlands: Circular economy competences have been embedded across construction and engineering VET programmes through a major curriculum reform developed in close partnership with leading employers. The reform introduced mandatory learning outcomes on design for deconstruction, recycled-content material specification, and lifecycle cost analysis — competences that Albanian and Kosovo VET programmes have not yet systematically developed.
Finland: Green skills have been integrated as cross-cutting competences across all VET qualification areas under Finland's national green skills strategy. Every VET programme — regardless of sector — now includes learning outcomes related to environmental responsibility, resource efficiency, and sustainable professional practice. This systemic approach contrasts sharply with the current situation in Albania and Kosovo, where sustainability integration depends on the initiative of individual educators rather than national curriculum standards.
Germany: The dual system apprenticeship model in waste management and environmental services combines structured workplace learning with formal VET curriculum delivery. German apprentices in waste management develop competences in real workplaces from the beginning of their training — a model that offers important lessons for Albanian and Kosovo VET institutions seeking to strengthen the connection between curriculum content and labour-market practice.
Through this comparative analysis, participants develop the capacity to position their own institutions as active contributors to European

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sustainability goals — not merely as recipients of external policy mandates. They learn to adapt EU good practices to the specific realities of the Albanian and Kosovo VET context, taking into account differences in institutional capacity, national qualification frameworks, employer engagement cultures, and the specific environmental challenges facing both countries.
This unit actively supports the EU integration agenda of Albania and Kosovo by building the institutional curriculum design capacity needed to align VET programmes with EU sustainability frameworks, the European Green Deal, and the Circular Economy Action Plan — while ensuring that this alignment is genuine and context-sensitive, not merely formal compliance on paper.

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Module 12 – Integrating Global Sustainability Goals into VET

1. Overview of the Unit

1.1. Unit information

Unit title	Integrating Global Sustainability Goals into VET
This unit is part of…	Standalone course
Prerequisites (if any)	N/A

1.2. Justification and objectives of the Teaching Unit

Vocational Education and Training (VET) systems in Albania and Kosovo are increasingly expected to contribute to sustainable development and the green transition. While both countries have committed to global and European sustainability frameworks—such as the United Nations Sustainable Development Goals (SDGs) and EU environmental and climate priorities—their translation into concrete VET curricula and teaching practices remains limited.

In many VET programmes, sustainability and global development goals are addressed at a policy or awareness level, but they are not systematically integrated into learning outcomes, teaching content, or assessment frameworks. As a result, VET learners often lack a clear understanding of how global sustainability objectives relate to their professions, daily work practices, and future employment opportunities. This teaching unit responds to the need to bridge the gap between global sustainability frameworks and vocational education practice. It focuses on supporting VET educators and curriculum designers in translating SDGs and related sustainability goals into practical, teachable, and assessable learning components within VET programmes, particularly in sectors linked to waste management, environmental services, and green jobs.

The unit emphasizes relevance, applicability, and coherence, ensuring that global sustainability goals are not treated as abstract concepts but as integrated elements of vocational competences and professional practice.
The main objective of this unit is to strengthen the capacity of VET educators and curriculum designers to **integrate global sustainability goals into vocational education and training in a structured and meaningful way**.
By the end of this unit, participants will be able to:

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- understand the relevance of global sustainability goals, particularly the Sustainable Development Goals (SDGs), for VET systems and vocational professions;
- identify sustainability goals and targets that are most relevant to waste management, circular economy, and green sectors;
- translate global sustainability objectives into **learning outcomes, competences, and curriculum content** suitable for VET programmes;
- design teaching activities that connect sustainability goals with real vocational contexts and work-based learning;
- integrate sustainability goals across curricula in a coherent manner, avoiding isolated or purely theoretical approaches;
- adapt global sustainability frameworks to national, local, and institutional VET contexts in Albania and Kosovo.

Through these objectives, the unit supports the development of **future-oriented VET curricula** that contribute to sustainable development while enhancing learners' employability and professional responsibility.

1.3. Contextualization of the issue in the country (Albania or Kosovo)

In Albania and Kosovo, sustainability and environmental protection have gained increasing attention at policy level, particularly through commitments to the United Nations Sustainable Development Goals (SDGs), national environmental strategies, and alignment efforts with European Union priorities. Despite this progress, the integration of global sustainability goals into **Vocational Education and Training (VET)** remains limited and uneven.

Within the current VET systems, sustainability is often addressed through **general awareness activities or standalone subjects**, rather than being systematically embedded into vocational curricula, learning outcomes, and assessment practices. As a result, many VET learners have limited opportunities to understand how global sustainability goals relate directly to their professions, sector-specific skills, and future roles in the labor market.

This gap is particularly evident in sectors such as waste management, environmental services, construction, tourism, and manufacturing, where sustainability and resource efficiency are becoming essential professional requirements. While these sectors are increasingly influenced by global and European sustainability frameworks, VET programmes frequently lack structured approaches for translating these frameworks into **practical vocational competences**.

In both Albania and Kosovo, VET educators and curriculum designers face challenges in:

- identifying which global sustainability goals are most relevant to specific vocational profiles;
- translating abstract global targets into concrete learning outcomes and teaching activities;
- aligning sustainability goals with national qualification frameworks and occupational standards;
- ensuring coherence between sustainability objectives, teaching practices, and assessment methods.

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Additionally, institutional capacity for adapting global frameworks to local realities is still developing. Differences in infrastructure, labor-market conditions, and institutional resources require sustainability goals to be contextualized in a way that is **realistic, applicable, and meaningful** for learners and training providers.
In this context, the present teaching unit responds to a clear need to support VET educators and curriculum designers in **bridging global sustainability goals with local vocational practice**. By providing tools and methodologies for contextualizing and integrating sustainability objectives into VET curricula, the unit contributes to strengthening the relevance, quality, and impact of vocational education in Albania and Kosovo, while supporting broader national and European sustainability ambitions.

1.3. Expected results in terms of teaching practices

As a result of this teaching unit, participating VET educators and curriculum designers are expected to introduce **measurable improvements in their teaching and curriculum development practices** related to the integration of global sustainability goals.
Specifically, the unit will lead to the following results in teaching practices:

- **Improved ability to integrate global sustainability goals into vocational curricula**, with teachers systematically embedding relevant Sustainable Development Goals (SDGs) into learning outcomes, teaching content, and assessment activities.
- **Shift from awareness-based sustainability teaching to competence-oriented approaches**, enabling educators to link global sustainability objectives with concrete vocational skills and professional practices.
- **Enhanced capacity to contextualize global frameworks**, allowing teachers to adapt SDGs and sustainability priorities to national, local, and institutional realities in Albania and Kosovo.
- **Increased use of interdisciplinary and applied teaching methods**, connecting sustainability goals with sector-specific vocational subjects such as waste management, environmental services, tourism, construction, and manufacturing.
- **Strengthened alignment between teaching practices and labor-market needs**, ensuring that sustainability-related competences reflect current and emerging requirements in green and circular economy sectors.
- **Greater confidence among educators in designing sustainability-focused learning activities**, including project-based tasks, case studies, and work-based learning scenarios linked to global sustainability objectives.

Overall, the unit supports the professional development of VET educators by enabling them to integrate global sustainability goals into their teaching practices in a structured, practical, and assessable manner, contributing to more relevant and future-oriented vocational education.

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1.4. Connection with the objectives of the WARP Project

This teaching unit is directly aligned with the core objectives of the WARP project, which aims to strengthen Vocational Education and Training (VET) systems in Albania and Kosovo by integrating sustainability, circular economy principles, and green skills into education and training practices.

The unit contributes to the WARP project objectives in the following ways:

- It supports **capacity building of VET educators and curriculum designers** by enhancing their ability to understand, interpret, and apply global sustainability goals—particularly the Sustainable Development Goals (SDGs)—within vocational education contexts.
- It contributes to the **modernization of VET teaching and curricula**, promoting the integration of sustainability objectives into learning outcomes, teaching activities, and assessment methods rather than treating them as isolated or theoretical topics.
- It strengthens the **link between global sustainability frameworks and vocational practice**, ensuring that VET programmes respond to environmental challenges and labor-market needs associated with the green and circular economy transition.
- It supports the development of **transferable and scalable learning approaches**, enabling the creation of Open Educational Resources (OER) and teaching practices that can be adapted and reused across VET institutions in Albania, Kosovo, and beyond.
- It reinforces the project's transnational dimension by encouraging educators to align local VET practices with **European and international sustainability standards**, while adapting them to national and institutional realities.

Through these contributions, the unit plays a key role in achieving WARP's overall objective of improving the relevance, quality, and impact of VET education, while equipping learners with competences that support sustainable development and responsible professional practice.

2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	Ability to understand global sustainability challenges and goals, particularly the Sustainable Development Goals (SDGs), and to relate them to vocational sectors, professions, and environmental responsibilities within VET contexts.

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Description of the Learning Outcomes related to this competence	Participants will be able to: identify SDGs and sustainability targets relevant to vocational education and specific sectors; ● explain the link between global sustainability goals and environmental challenges at local and sectoral level; ● connect sustainability objectives with professional practices in waste management, environmental services, and green jobs; ● promote environmental responsibility and sustainable thinking within vocational learning contexts
Description of the evaluation criteria	The acquisition of this competence will be verified through: ● analysis of learning activities and curriculum elements that reference relevant SDGs; ● evidence of correct contextualization of global sustainability goals in vocational scenarios; ● assessment of participants' ability to relate sustainability goals to concrete vocational practices.

2.2. Digital competencies

Description of the competence	Ability to use digital tools and platforms to communicate, visualize, and integrate global sustainability goals into VET teaching and learning processes, including the development of digital learning materials and awareness content.
Description of the Learning Outcomes related to this competence	Participants will be able to: ● use digital tools to present and visualize sustainability goals and concepts; ● design digital learning activities that link SDGs with vocational content; ● create or adapt digital materials (presentations, infographics, videos) related to sustainability education; ● support blended and online learning approaches for sustainability topics.
Description of the evaluation criteria	The acquisition of this competence will be verified through:

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	• review of digital learning materials developed by participants; • effective use of digital platforms during learning activities; • quality and clarity of digital content linking sustainability goals to VET subjects.

2.3. Pedagogical competencies

Description of the competence	Ability to integrate global sustainability goals into VET teaching practices using learner-centered, competence-based, and applied pedagogical approaches that connect theory with vocational practice.
Description of the Learning Outcomes related to this competence	Participants will be able to: • design teaching activities that embed sustainability goals into vocational subjects; • apply interdisciplinary and project-based learning approaches related to sustainability; • align sustainability-related learning outcomes with teaching methods and assessment strategies; • adapt pedagogical approaches to different learner groups and institutional contexts.
Description of the evaluation criteria	The acquisition of this competence will be verified through: • assessment of lesson plans or teaching activities integrating sustainability goals; • evaluation of coherence between learning outcomes, activities, and assessment methods; • peer and trainer feedback on pedagogical effectiveness and applicability.

3. Learning outcomes

By the end of this course, students should be able to:

	Knowledge	**Skills**	**Competences**

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LO1	Understand the main global sustainability frameworks, with particular focus on the Sustainable Development Goals (SDGs), and their relevance to vocational education and training and to specific vocational sectors.	Identify and select sustainability goals and targets that are relevant to different VET profiles and vocational sectors.	Relate global sustainability goals to vocational contexts and professional practices in a meaningful and sector-relevant way.
LO2	Understand how global sustainability goals can be translated into learning outcomes, competences, and teaching content within VET programmes.	Translate sustainability goals into measurable learning outcomes and practical teaching activities suitable for VET learners.	Integrate global sustainability goals coherently into VET curricula and teaching practices, ensuring relevance and applicability.
LO3	Understand the alignment between sustainability-related learning outcomes, teaching methodologies, and assessment approaches in vocational education.	Design teaching and learning activities that embed sustainability goals into vocational subjects using applied and learner-centered methods.	Implement sustainability-oriented teaching practices that support learners' professional responsibility, employability, and contribution to sustainable development.

4. Teaching contents of the Unit *(the following are proposals for the content of the unit)*

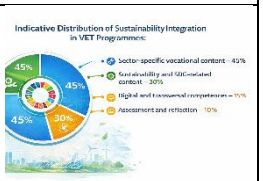
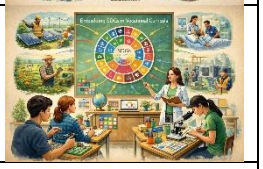
Module 1: Integrating Global Sustainability Goals into VET			
Module number & title	**Content type**	**Content development**	**Notes**
1.*****	Paragraph/Heading	Introduction to global sustainability frameworks and their relevance for Vocational Education and Training (VET). This section presents the role of VET in supporting sustainable development and explains why global sustainability goals must be translated into vocational learning and professional practice.	Main content of the unit
1.1.	Paragraph/Subheading	Overview of the Sustainable Development Goals (SDGs) and their relevance to vocational sectors.	Main content of this part of the

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<table>
<tr><td></td><td></td><td></td><td>unit</td></tr>
<tr><td>1.1.</td><td>Paragraph</td><td>Explanation of the SDGs with emphasis on goals related to environmental sustainability, waste management, resource efficiency, and green jobs. The section highlights how these global goals relate to vocational professions and sector-specific skills.</td><td>Explanation of the main content</td></tr>
<tr><td></td><td>Note</td><td>Not all SDGs are equally relevant for every vocational profile; educators should select and contextualize sustainability goals according to sector needs and institutional priorities.</td><td></td></tr>
<tr><td></td><td>Columns</td><td>Global sustainability goals (SDGs)</td><td></td></tr>
<tr><td></td><td></td><td>Relevance of SDGs to vocational sectors and professions</td><td></td></tr>
<tr><td></td><td></td><td>Examples of sustainability-related vocational practices</td><td>  </td></tr>
<tr><td></td><td>Table</td><td><table>
<tr><td>SDG</td><td>Vocational sector</td><td>Practical application</td></tr>
<tr><td>Responsible consumption</td><td>Waste management</td><td>Waste reduction practices</td></tr>
<tr><td>Climate action</td><td>Construction</td><td>Energy-efficient processes</td></tr>
<tr><td>Sustainable cities</td><td>Tourism</td><td>Sustainable tourism services</td></tr>
</table></td><td></td></tr>
<tr><td></td><td>Divider</td><td>By default, dividers are labeled as CONTINUE, but you can customize this label as needed.</td><td></td></tr>
<tr><td>2.</td><td>Statement</td><td>Integrating global sustainability goals into VET ensures that learners understand their professional role in contributing to sustainable development and environmental responsibility.</td><td></td></tr>
</table>

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3.	List	• Identification of relevant sustainability goals for vocational profiles • Translation of SDGs into learning outcomes and competences • Integration of sustainability into vocational subjects • Alignment with labor-market and sector needs	Use a bulleted list
4.	Chart	Indicative distribution of sustainability integration in VET programmes: • Sector-specific vocational content – 45% • Sustainability and SDG-related content – 30% • Digital and transversal competences – 15% • Assessment and reflection – 10%	
5. Image	Image	*Visual representation of the connection between global sustainability goals, vocational sectors, and professional practices.*	
5. Image	Image	*Illustration showing how SDGs are embedded across vocational curricula and teaching activities.*	
5. Image	Image	Short explanatory text describing how educators can contextualize global sustainability goals to specific vocational sectors (e.g. waste management, tourism, construction), supported by a visual example. *Educators can contextualize global sustainability goals by translating them into concrete vocational tasks and sector-specific practices. For example, in waste management, SDGs are addressed through recycling systems and resource efficiency; in tourism, through sustainable services and responsible consumption; and in construction, through energy-efficient methods and green materials. This approach helps learners understand how global sustainability goals apply directly to their future professions and daily work activities.*	Image and text Add image (filename.jpg)

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5. Image	Image	*Three images illustrating:* 1. *Global sustainability goals (SDGs overview)* 2. *Sector-specific vocational applications* 3. *Sustainability-oriented professional practices*	
5. Image	Image	*Three-column visual grid representing sustainability integration across:* ● *Environmental responsibility* ● *Social responsibility* ● *Economic sustainability*	
6. Video & audio	Video	-	Add video file (filename.mp4)
6. Video & audio	Video	-	Embed video link
6. Video & audio	Audio	-	Add audio file (filename.mp3)
7. Files	File	-	Add file here (filename.pdf)
8. Accordion and tabs	Accordion	**Title**: Relevant SDGs for VET **Text/description:** Overview of the Sustainable Development Goals most relevant to vocational	Add images (filename.jpg)

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		education, with short explanations of their connection to professional skills and sectors.	
	Accordion	**Title:** From global goals to vocational learning **Text/description**: Explanation of how global sustainability goals can be translated into learning outcomes, teaching activities, and assessment in VET programmes.	Add video file (filename.mp4)
8. Accordion and tabs	Tab	**Title:** Teaching strategies **Text/descr**iption: Practical teaching approaches for integrating sustainability goals into vocational subjects using applied and learner-centered methods.	Add image (file-name.jpg)
	Tab	**Title:** Assessment approaches **Text/description:** Examples of assessment methods used to evaluate sustainability-related learning outcomes in vocational education.	Add video file (filename.mp4)
9. Labeled graphic	Labeled graphic	**Marker 1** – Add images **Description:** Global sustainability goals (SDGs) as the overarching framework guiding vocational education.	Add image (file-name.jpg)
		Marker 2 – Add infographic **Description:** Vocational sectors where sustainability goals are applied (e.g. waste management, tourism, construction).	Add image (file-name.jpg)
		Marker 3 – Add audio **Description:** Explanation of how sustainability goals translate into professional practices and daily work tasks.	Add audio (file-name.mp3)
		Marker 4 – Add text **Description:**	

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		Sustainability-oriented competences developed through vocational education and training.	
10.Scenario	Scenario	**Slide 1** You are a VET educator preparing a lesson for students in a vocational programme. Your task is to integrate global sustainability goals into your subject while keeping the content relevant to your vocational sector.	
		Slide 2 Select one Sustainable Development Goal and design a short learning activity that connects it to real vocational tasks and professional responsibilities in your sector.	
		Slide 3 By integrating sustainability goals into vocational learning, educators help learners become skilled professionals and responsible contributors to sustainable development.	
11.Timeline	Timeline	**Date 1: 2026** Introduction of global sustainability goals and initial integration of the Sustainable Development Goals (SDGs) into VET curricula, teaching practices, and educator training.	
		Date 2: 2027 Consolidation and practical implementation of SDG-based teaching activities, sustainability-oriented competences, and applied learning approaches across VET programmes.	
12.Flashcards	Flashcards	**Flashcard 1** **Front:** SDGs icons **Back:** Global sustainability goals provide a shared framework for addressing environmental, social, and economic challenges.	

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		Flashcard 2 **Front:** Vocational training environment **Back:** Sustainability applied in a vocational workplace	
		Flashcard 3 **Front:** Sustainability in VET **Back:** Example of sustainability-oriented professional practice	
13. Multiple choice and multiple response	Multiple choice	**Question 1** Which is the main purpose of integrating global sustainability goals into VET? **Answer 1** To connect vocational skills with sustainable development objectives **Feedback:** Correct. Sustainability goals help align vocational education with future labor-market needs. **Answer 2:** To replace vocational skills with theoretical content **Feedback:** Incorrect. Sustainability supports and strengthens vocational competences.	**Answer 1**
13. Multiple choice and multiple response	Multiple answer	**Question 1:** Which of the following actions support the integration of sustainability goals into VET? *(Select all that apply)* **Answer 1:** Linking SDGs to vocational learning outcomes **Feedback:** Correct. Learning outcomes should reflect sustainability objectives. **Answer 2:** Designing practical activities related to sustainability **Feedback:** Correct. Applied learning strengthens sustainability competences. **Answer 3:** Treating sustainability as an isolated topic **Feedback:** Incorrect. Sustainability should be integrated across subjects.	**Answer 1** **Answer 2**
14. Matching and fill in the blank	Matching	**Content type:** Matching **First choice:** Sustainable Development Goals **Match:** Global sustainability framework	

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		Second choice: Vocational sector **Match:** Professional field of application **Third choice:** Professional practice **Match:** Sustainability-oriented work activity	
14. Matching and fill in the blank	Fill in the blank	**Sentence:** Integrating global sustainability goals into VET helps learners develop **responsible**, **future-oriented**, and **sustainability-related** professional competences.	**responsible**, **future-oriented** **sustainability-related**

5 Activities (examples)

Module 1: Integrating Global Sustainability Goals into VET			
Module number & title	**Activity type**	**Activity development**	**Notes**
Flashcards	Flashcards	**Flashcard 1** **Front:** Image  **Back:** SDGs icons overview	
Flashcards	Flashcards	**Flashcard 2** **Front:**Vocational training environment **Back:** Sustainability applied in a workplace context	

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Flashcards	Flashcards	**Flashcard 3** **Front:** Sustainability in VET **Back:** Image	
Multiple choice and multiple response	Multiple choice	**Question 1** Why is it important to integrate global sustainability goals into vocational education? **Answer 1** To connect vocational skills with sustainable development objectives **Feedback:** Correct. Sustainability strengthens the relevance of vocational skills for future labor-market needs. **Answer 2** To replace vocational training with theoretical concepts **Feedback:** Incorrect. Sustainability complements vocational competences rather than replacing them.	**Answer 1**.
Multiple choice and multiple response	Multiple answer	**Question 1** Which of the following actions support the integration of sustainability goals into VET? *(Select all that apply)* **Answer 1** Linking SDGs to vocational learning outcomes **Feedback:** Correct. Learning outcomes should reflect sustainability objectives. **Answer 2** Correct. Applied learning supports competence development. **Feedback:** Correct. Applied learning supports competence development. **Answer 3:** Treating sustainability as a separate, optional topic **Feedback:** Incorrect. Sustainability should be integrated across subjects.	Answer 1, Answer 2
Matching and fill in the blank	Matching	**First choice:** Sustainable Development Goals **Match:** Global sustainability framework **Second choice:** Vocational sector **Match:** Area of professional application **Third choice:** Professional practice **Match:** Sustainability-oriented work activity	

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Matching and fill in the blank	Fill in the blank		Specify here the missing word or words.
Digital map	Digital map	Creation of a digital map of local recycling points or similar, depending on the topic of the unit	
Design of a small waste-separation system within the institution		Design of a small waste-separation system within the institution	
Digital simulation		Digital simulation of the life cycle of a container	
Digital awareness	Videos, infographics	Creation of digital awareness campaigns (videos, infographics)	
Hackathon	Hackathon	Mini hackathon…	

6. Methodology

5.1. Project-Based Learning (PBL) and collaborative Learning	Project-Based Learning is used to engage learners in practical tasks where global sustainability goals are translated into concrete vocational learning activities. Learners work collaboratively to design, analyze, and reflect on sustainability-oriented solutions relevant to their vocational fields.
5.2. Collaborative learning between institutions in Albania and Kosovo	Collaborative learning is promoted through joint activities and shared learning experiences between VET institutions in Albania and Kosovo. This approach encourages exchange of good practices, comparison of local contexts, and mutual

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	learning on integrating sustainability goals into vocational education.
5.3. Blended Learning	Blended learning combines face-to-face sessions with online learning activities. Digital materials, interactive content, and virtual discussions complement classroom-based learning, ensuring flexibility and accessibility while supporting the integration of sustainability topics into VET curricula.
5.4. Online and mobile Learning tools	Online platforms and mobile learning tools are used to access learning materials, digital resources, videos, and interactive activities related to sustainability goals. These tools support self-paced learning and enhance digital competences alongside sustainability awareness.
5.5. Real case studies	Real case studies from vocational sectors are used to demonstrate how global sustainability goals are applied in professional practice. Learners analyze real-life examples to understand challenges, solutions, and impacts related to sustainability in vocational contexts.
5.6. Visits to companies in the sector	Where possible, visits to companies or organizations are organized to observe sustainability-oriented professional practices in real working environments. These visits help learners connect theoretical sustainability concepts with practical vocational applications.
5.7. Workshops and experiential learning	Interactive workshops and experiential learning activities allow learners to actively explore sustainability issues through discussions, group work, simulations, and practical exercises. This hands-on approach strengthens understanding and encourages active participation.
5.8. Community based and participatory approaches	Community-based and participatory approaches involve learners in activities connected to their local communities. Learners engage with local stakeholders to explore how global sustainability goals can be addressed through vocational education and community action.

7. Resources

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The following resources support the implementation of this unit and facilitate the integration of global sustainability goals into vocational education and training:

- **International frameworks and guidelines**
- Official documentation and learning materials related to the Sustainable Development Goals (SDGs), including UN and EU policy frameworks relevant to education, skills, and sustainable development.
- **Digital learning materials**
- Short educational videos, infographics, interactive presentations, and open educational resources (OERs) introducing sustainability concepts and their relevance to vocational sectors.
- **Sector-specific examples and case studies**
- Practical examples and case studies from vocational sectors such as waste management, tourism, construction, and related fields, illustrating sustainability-oriented professional practices.
- **Online platforms and tools**
- Learning management systems, collaborative digital tools, and mobile applications used to deliver content, facilitate group work, and support blended and online learning.
- **Visual and graphic resources**
- SDGs icons, visual diagrams, charts, and infographics supporting the understanding of sustainability integration across environmental, social, and economic dimensions.
- **Local and regional reference materials**
- Reports, strategies, and good practices related to sustainability and vocational education in Albania, Kosovo, and the EU context.

8. Assessment criteria

Assessment of this unit is based on continuous evaluation of learners' engagement, understanding, and practical application of global sustainability goals within vocational education and training contexts.

8.1. Use of digital tools

Learners demonstrate the ability to use appropriate digital tools (e.g. online platforms, digital maps, infographics, presentations) to explore, present, and communicate sustainability-related concepts in VET.

8.2. Understanding the sustainability framework

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Learners show a clear understanding of the Sustainable Development Goals (SDGs) and their relevance to vocational education, professional sectors, and future employment.

8.3. Ability to implement real improvements

Learners are assessed on their capacity to propose realistic and context-based sustainability improvements related to vocational teaching, learning activities, or institutional practices.

8.4. Final product

Learners develop a final output (e.g. sustainability-oriented learning activity, action plan, or institutional improvement proposal) demonstrating the integration of global sustainability goals into a VET context.

8.5. Self- and co-assessment

Learners reflect on their own learning process and provide constructive feedback to peers, supporting collaborative learning and critical thinking.

9. Inclusion of the EU/transnational perspective

This unit integrates a European and transnational perspective by comparing approaches to sustainability integration in vocational education in **Albania, Kosovo, and the European Union**.

Learners explore how European policies, frameworks, and good practices related to sustainability and vocational education can be adapted to local contexts. Differences and similarities between national VET systems are discussed, highlighting opportunities for alignment with EU standards while respecting local needs and realities.

Through transnational examples and shared learning experiences, the unit promotes mutual understanding, cooperation, and the transfer of European sustainability principles into vocational education and training practices in the Western Balkans.

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Module 13 – Evaluating and Assessing Environmental Learning Outcomes

1. Overview of the Unit

1.1. Unit information

Unit title	**Evaluating and Assessing Environmental Learning Outcomes**
This unit is part of…	**Standalone course**
Prerequisites (if any)	**Module 13 can be studied independently; completion of earlier WARP modules is recommended but not required**

1.2. Justification and objectives of the Teaching Unit

This unit addresses one of the most persistent quality gaps in sustainability-oriented Vocational Education and Training (VET): the absence of effective, competence-based assessment tools for environmental learning outcomes. VET institutions across Albania and Kosovo have made significant strides in integrating waste management and circular economy topics into their programmes, yet learner evaluation remains largely confined to written knowledge tests that reveal whether a learner can recall definitions — not whether they can actually perform environmental tasks in a professional setting.

Module 13 equips professional development VET trainers with the knowledge, tools, and methodological confidence to design, implement, and continuously improve assessment systems specifically calibrated to environmental and sustainability competences. Duration: approximately 6–8 hours of self-paced learning, complemented by practical workshop activities.

Specific objectives: (1) Understand the theoretical foundations of competence-based and outcome-oriented assessment in sustainability education. (2) Design practical assessment tools — rubrics, observation checklists, portfolio frameworks — tailored to environmental and waste management competences. (3) Apply both formative and summative evaluation methods appropriate to green and circular economy learning contexts. (4) Use digital tools to manage, document, and communicate assessment data. (5) Analyse assessment results to inform improvements in teaching and curriculum design. (6) Align evaluation practices with Albanian and Kosovar national qualification frameworks and European standards such as EQF and EQAVET.

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1.3. Contextualization of the issue in the country (Albania and Kosovo)

Albania and Kosovo are both engaged in long-term processes of aligning their VET systems with European Union standards. Both countries have adopted competence-based qualification frameworks through NAVETQ (Albania) and KQA (Kosovo), which formally require learning to be described and assessed in terms of knowledge, skills, and competences. In practice, however, the shift from outcome definition to outcome measurement has been slow and uneven across institutions.

Field observations within the WARP project identify recurring assessment quality gaps: evaluation tools confined to written tests; grading based on broad, subjective criteria rather than explicit performance indicators; no systematic feedback mechanisms beyond a final grade; limited or absent digital documentation of learner progress; and generic rubrics not adapted to environmental or waste management vocational contexts. These gaps are especially consequential in sectors directly relevant to WARP — construction, environmental services, manufacturing, tourism, and energy — where environmental competence carries direct implications for regulatory compliance and workplace safety. Smaller and regional VET providers face additional constraints: limited trainer capacity, insufficient digital infrastructure, and heavy administrative workloads that leave little time for assessment design and quality review.

1.4. Expected results in terms of teaching practices

Completion of this unit is expected to produce visible changes in how VET trainers approach the evaluation of environmental learning. Specifically: trainers will move from informal grading to tool-based, criterion-referenced evaluation — evidenced by the presence of rubrics and checklists in course documentation; assessment tasks will be directly linked to stated learning outcomes through alignment matrices used in course planning; formative feedback will be embedded during courses rather than provided only at the end; digital documentation of learner progress will be introduced for sustainability-related courses; and peer and self-assessment practices will be incorporated, giving learners an active role in their own evaluation process. Across partner institutions in Albania and Kosovo, shared evaluation criteria will begin to be developed and exchanged, supporting greater consistency and comparability of sustainability learning outcomes.

1.5. Connection with the objectives of the WARP Project

Module 13 directly supports the WARP project's core mission to strengthen VET capacity in the Western Balkans through the integration of waste management, circular economy, and sustainability competences. While earlier WARP modules address what to teach, this module

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addresses how to verify that the teaching has produced genuine competence development. It contributes to the project objective of modernising VET institutions by promoting transparent, outcome-oriented, and digitally supported evaluation aligned with EQAVET and EQF. It ensures that sustainability competences are not only taught but also properly assessed and formally recognised. It provides transferable assessment models and templates reusable across all nine partner institutions and beyond. And it connects VET assessment practices to real labour market needs, promoting evaluation methods that reflect authentic professional tasks in environmental services sectors across both countries.

2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	The ability to understand, evaluate, and monitor environmental and sustainability-related learning outcomes in VET programmes, with specific reference to waste management, circular economy practices, and environmental services. This includes recognising the environmental dimensions of vocational performance and translating them into assessable criteria.
Description of the Learning Outcomes related to this competence	• Identify key environmental and sustainability competences relevant to vocational profiles in waste management and environmental services in Albania and Kosovo. • Define clear performance indicators for evaluating ecological knowledge, skills, and professional behaviour in real vocational contexts. • Assess learners' ability to apply circular economy principles, waste separation procedures, and environmental regulations in practical work situations. • Analyse evidence of environmental learning using structured evaluation tools such as observation checklists and practical performance tasks. • Monitor learner progress in developing sustainability competences over time using both qualitative and quantitative evidence.
Description of the evaluation criteria	• Quality and specificity of environmental assessment tools and rubrics developed by participants. • Accuracy and relevance of performance indicators aligned to real vocational tasks

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	in waste management sectors. • Ability to design practical evaluation tasks that reflect authentic professional situations in the environmental field.

2.2. Digital competencies

Description of the competence	The ability to use digital tools and platforms to design, implement, manage, and communicate assessment and evaluation processes for environmental learning outcomes — including the selection of appropriate digital tools, creation of digital assessment materials, and ethical management of learner data.
Description of the Learning Outcomes related to this competence	• Select and use digital platforms appropriate for administering assessments related to sustainability and waste management competences. • Develop digital rubrics, online evaluation forms, and interactive assessment templates using widely available tools such as LMS platforms and Google Workspace. • Create and manage digital portfolios and e-documentation systems for tracking learner progress in sustainability courses. • Apply digital feedback tools — including LMS comment functions and collaborative annotation — to support formative assessment. • Handle assessment data responsibly, respecting data protection principles and ensuring accessibility for all learners.
Description of the evaluation criteria	• Functionality, clarity, and usability of digital assessment tools and templates created or adapted by participants. • Demonstrated ability to manage and interpret assessment data using at least one digital platform. • Evidence of digital feedback provided to learners during practical exercises within the module.

2.3. Pedagogical competencies

Description of the competence	The ability to design, apply, and adapt pedagogical approaches that support effective,

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	fair, and learner-centred assessment of environmental learning outcomes in VET — integrating evaluation seamlessly into the teaching and learning cycle so that assessment drives improvement rather than simply measuring a final result.
Description of the Learning Outcomes related to this competence	• Design assessment activities fully aligned with stated learning outcomes, teaching methods, and real vocational practice. • Apply learner-centred and project-based approaches to evaluate environmental competences in a fair and inclusive manner. • Integrate formative assessment and reflective practices into sustainability-oriented teaching cycles. • Adapt assessment strategies to different learner groups, vocational profiles, institutional contexts, and available resources. • Use structured feedback as a tool to support learner motivation, professional identity, and continuous improvement in environmental practices. • Promote transparency, consistency, and comparability in sustainability-related assessment across institutions.
Description of the evaluation criteria	• Coherence and pedagogical quality of assessment plans, lesson activities, and evaluation tasks developed by participants. • Demonstrated alignment between learning outcomes, teaching methods, and assessment tools in a completed module design exercise. • Effectiveness and inclusiveness of assessment approaches as rated through peer and trainer feedback. • Reflection log demonstrating awareness of own pedagogical strengths and areas for development.

3. Learning outcomes

By the end of this course, students should be able to:

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	Knowledge	Skills	Competences
LO1	Explain the principles of competence-based and outcome-oriented assessment in sustainability education, including the role of performance criteria, indicators, and quality standards in ensuring reliable evaluation.	Design assessment frameworks that translate sustainability competences into clear, measurable evaluation criteria aligned with vocational performance requirements.	Develop structured and transparent assessment systems for sustainability-oriented training programmes, ensuring coherence between learning outcomes, teaching activities, and evaluation tools.
LO2	Identify the main categories of assessment methods for environmental competences — project-based, portfolio, workplace observation, digital, and peer-based — and the conditions under which each is most appropriate.	Select and apply practical and digital assessment methods to evaluate learners' environmental knowledge, skills, and professional behaviour in a fair, evidence-based manner.	Implement diverse and complementary evaluation practices that reflect real vocational tasks, respond to different learner needs, and meet sector and qualification standards.
LO3	Describe the relationship between assessment results, formative feedback, reflective practice, and continuous improvement of teaching and curriculum quality in sustainability-oriented VET programmes.	Analyse assessment results and learner feedback to identify patterns, strengths, and gaps, and to recommend concrete improvements in teaching methods and course content.	Apply evaluation outcomes to support institutional quality assurance, curriculum revision, and long-term improvement of environmental training programmes in alignment with EQAVET standards.

4. Teaching contents of the Unit

(the following are proposals for the content of the unit)

TOPIC 1: Foundations of Competence-Based Assessment in Environmental VET

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Module 1: Topic 1: Foundations of Competence-Based Assessment in Environmental VET			
Module number & title	**Content type**	**Content development**	**Notes**
1.1 Introduction	***Paragraph / Heading***	Why Assessment is the Missing Link in Sustainability Education Consider a VET trainer who has just delivered a 30-hour course on sustainable waste management to construction technicians. The learners attended all sessions, completed the required reading, and passed a written test on waste separation categories and legal regulations. Three months later, the same technicians are observed on a construction site — recyclable materials are mixed with general waste, hazardous materials are stored incorrectly, and no disposal documentation has been maintained. What went wrong? The answer, in most cases, is not that learners did not learn. It is that the assessment never verified whether they could actually do what the course intended. Written tests measure recall — they do not measure professional competence. This gap between measuring knowledge and measuring competence is the central problem that this module addresses. Assessment and evaluation are not administrative formalities. In well-designed VET programmes, they are the mechanism through which educators verify the quality of their teaching, identify gaps in learner development, and provide the evidence needed to improve courses, curricula, and institutional practices. In sustainability-oriented VET, where the goal is genuine behavioural change in relation to environmental responsibility, the quality of assessment is especially critical.	*Opening scenario — connects immediately to real experience of VET trainers in the region. Use as discussion prompt: "Does this situation sound familiar?"*
1.1	***Paragraph / Subheading***	What is Competence-Based Assessment? Competence-based assessment (CBA) is an approach to evaluation that focuses on whether a learner can demonstrate professional competence — the integration of knowledge, skills, and appropriate professional attitudes — in realistic conditions. It contrasts with traditional knowledge-based assessment, which tests whether a learner can recall or reproduce information.	

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<table>
<tr><td></td><td></td><td>In the context of environmental and sustainability VET, this distinction is critical. A learner who can list the five steps of a waste hierarchy but cannot apply them correctly when sorting materials in a real workshop has not achieved the environmental competence the course intended. Competence-based assessment requires evidence of actual performance in conditions that reflect real professional situations.

Three dimensions of competence must be addressed in any complete assessment system:</td><td></td></tr>
<tr><td>1.1</td><td>Table</td><td>
<table>
<tr><th>Dimension</th><th>What it covers</th><th>Example in waste management VET</th></tr>
<tr><td>Knowledge</td><td>Understanding of concepts, regulations, and principles</td><td>Knows the Albanian waste classification system and the legal categories of hazardous waste</td></tr>
<tr><td>Skills</td><td>Ability to perform specific tasks correctly and consistently</td><td>Can sort 5+ waste categories accurately within a time limit; can complete a waste disposal record form</td></tr>
<tr><td>Competences</td><td>Ability to act autonomously and responsibly in professional situations</td><td>Takes independent initiative to report non-compliant waste disposal observed at a construction site</td></tr>
</table>
</td><td>Use this table as a reference framework throughout the module</td></tr>
<tr><td>1.2</td><td>Paragraph / Subheading</td><td>Core Principles of Assessment Quality
Reliable and meaningful assessment of environmental learning outcomes rests on six quality</td><td></td></tr>
</table>

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<table>
<tr><td></td><td></td><td>principles. Every assessment tool and method used in sustainability-oriented VET should be evaluated against these principles before it is applied.</td><td></td></tr>
<tr><td>1.2</td><td>Table</td><td>
<table>
<tr><th>Principle</th><th>What it means</th><th>Example in environmental VET</th></tr>
<tr><td>Validity</td><td>The tool measures what it claims to measure — the actual intended competence</td><td>A practical sorting task is a valid measure of waste separation skill; a written test about sorting categories is not</td></tr>
<tr><td>Reliability</td><td>The tool produces consistent results regardless of who administers it or when</td><td>Two trainers independently applying the same rubric to the same learner produce the same result</td></tr>
<tr><td>Transparency</td><td>Criteria are communicated to learners clearly before the assessment takes place</td><td>The rubric with all performance levels is shared with learners at the start of the course, not after submission</td></tr>
<tr><td>Authenticity</td><td>Tasks reflect genuine professional situations in the relevant vocational sector</td><td>Assessment takes place in a simulated workshop or real workplace — not an abstract classroom exercise</td></tr>
<tr><td>Alignment</td><td>Assessment directly matches the stated learning outcomes and teaching activities</td><td>If the LO requires learners to design a plan, the assessment task must require them to design one — not describe one</td></tr>
<tr><td>Inclusiveness</td><td>Methods are accessible</td><td>Alternative submission formats are available for learners with</td></tr>
</table>
</td><td></td></tr>
</table>

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<table>
<tr><td></td><td></td><td><table><tr><td></td><td>and fair for all learners regardless of personal circumstances</td><td>disabilities or limited digital access</td></tr></table></td><td></td></tr>
<tr><td>1.3</td><td>Paragraph / Subheading</td><td>Assessment in the Albanian and Kosovar VET Context
Albania and Kosovo have both formally adopted competence-based qualification frameworks through NAVETQ (National Agency for Vocational Education and Training and Qualifications, Albania) and KQA (Kosovo Qualifications Authority). Both frameworks describe learning in terms of knowledge, skills, and competences — which should, in principle, lead naturally to competence-based assessment. In practice, however, the shift from outcome definition to outcome measurement has been slow and uneven.

Across VET providers in both countries, assessment of sustainability-related learning outcomes commonly suffers from the following documented gaps:</td><td>Reference national frameworks: Albania NQF and Kosovo Qualifications Framework — both aligned with EQF</td></tr>
<tr><td>1.3</td><td>Table</td><td><table><tr><th>Gap Area</th><th>Typical Current Practice</th><th>Impact on Learning Quality</th></tr><tr><td>Assessment tools</td><td>Written tests and attendance registers only</td><td>Competences are not verified; practical skills go unmeasured</td></tr><tr><td>Performance criteria</td><td>Broad, subjective grading ("pass/fail")</td><td>Inconsistent standards across trainers, institutions, and regions</td></tr><tr><td>Feedback mechanisms</td><td>End-of-course grades with no explanation</td><td>Learners cannot identify what to improve or how</td></tr></table></td><td>Use this table as a self-audit tool: ask participants "Which of these gaps exist in your institution?"</td></tr>
</table>

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		Digital documentation	**Paper-based records or no records at all**	**No systematic tracking of learner progress over time**		
		Sustainability-specific criteria	**Generic rubrics not adapted to environmental contexts**	**Environmental competences are not formally recognised or validated**		
		Practical task design	**No simulation or real-workplace assessment**	**Graduates lack verified ability to perform environmental tasks on the job**		
1.4	***Paragraph / Subheading***	The Assessment Cycle: A Framework for Continuous Improvement Effective assessment is not a single event — it is a continuous cycle embedded in the teaching and learning process. Understanding assessment as a cycle rather than a final exam is one of the most important conceptual shifts this module aims to produce. The assessment cycle consists of four interconnected stages:				
1.4	***Table***	**Stage**	**Key Question**	**What the trainer does**	**Tools used**	
		1. Design	**What do I need to assess, and how?**	**Define LOs and performance indicators; select appropriate assessment tools; create alignment matrix**	**Rubric templates, alignment matrices, indicator design cards**	
		2. Implement	**How do I collect valid evidence of**	**Administer assessment tasks;**	**Observation**	

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				competence?	observe learner performance; collect and document evidence	checklists, practical tasks, portfolios, digital submission	
			3. Evaluate & feedback	**What does the evidence tell me, and what should the learner do next?**	**Apply rubric criteria; calculate results; write specific, criterion-referenced feedback**	**Rubrics, feedback forms, LMS grade tools, self-assessment forms**	
			4. Improve	**What should I change in my teaching and assessment for the next cycle?**	**Analyse cohort results; identify teaching gaps; revise tools and activities**	**Data dashboards, peer review sessions, curriculum revision records**	
2.	***Statement***	***"In competence-based VET, assessment is not the end of learning — it is the engine that drives its improvement. What we measure shapes what we teach, and what we teach shapes what learners can do."***					
3.	***List***	Topic 1 — Key Concepts Summary • Competence-based assessment evaluates knowledge, skills, AND professional attitudes — not knowledge alone • The six quality principles: validity, reliability, transparency, authenticity, alignment, inclusiveness • Assessment gaps in Albanian and Kosovar VET include: over-reliance on written tests, absence of practical tasks, no feedback beyond final grades • The assessment cycle — Design → Implement → Evaluate → Improve — must be embedded in all VET courses					

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		• European frameworks (EQF, EQAVET) provide shared reference points for outcome-based qualification and quality assurance	
4.	***Chart***		***Use a comparative bar chart; source: WARP project field observations and CEDEFOP VET quality data***
	Divider	**—— CONTINUE: Topic 2 — Designing Assessment Tools ——**	

TOPIC 2: Designing Assessment Tools — Rubrics, Checklists, and Portfolios

Module 1: **Topic 2: Designing Assessment Tools — Rubrics, Checklists, and Portfolios**			
Module number & title	**Content type**	**Content development**	**Notes**

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<table>
<tr><td>2.1</td><td>Paragraph / Heading</td><td>Performance Indicators: The Building Block of Every Assessment Tool
Before any rubric, checklist, or portfolio framework can be designed, a trainer must first define performance indicators — specific, observable statements that describe exactly what a learner must be able to demonstrate to confirm they have achieved a learning outcome. Performance indicators are the building blocks of all assessment tools. A rubric without clear performance indicators is just a grading scale. An observation checklist without performance indicators is just a to-do list.

A well-written performance indicator answers four questions simultaneously: What does the learner do? In what context or situation does the learner do it? At what level of quality or accuracy? And what evidence confirms it has been done?</td><td></td></tr>
<tr><td>2.1</td><td>Table</td><td>Comparing weak and strong performance indicators for environmental VET:

<table>
<tr><th>Learning Outcome</th><th>❌ Weak Indicator</th><th>✓ Strong Indicator</th></tr>
<tr><td>Apply waste separation procedures</td><td>Learner knows about waste separation</td><td>In a timed simulation task, learner correctly separates at least 5 material categories into designated containers with zero hazardous material placement errors, within 10 minutes</td></tr>
<tr><td>Evaluate environmental compliance</td><td>Learner understands compliance checking</td><td>Using a provided site inspection report, learner identifies a minimum of 3 regulatory non-compliances and recommends</td></tr>
</table>
</td><td>Use the "weak vs. strong" comparison to spark a hands-on design exercise during workshops</td></tr>
</table>

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				specific corrective actions with reference to applicable Albanian/Kosovar waste legislation		
		Design a waste reduction plan	**Learner can plan waste reduction**	**Learner produces a written waste reduction plan for a given workplace scenario that includes: current waste volumes, quantified reduction targets, specific methods, named responsibilities, and a monthly monitoring schedule**		
		Conduct an environmental audit	**Learner carries out an audit**	**Using a structured audit checklist, learner systematically inspects a given workplace and produces a written report documenting findings, scoring each criterion, and proposing at least two priority improvement actions**		
2.2	***Paragraph***	Designing Rubrics for Environmental Competences A rubric is a structured evaluation tool that describes multiple levels of performance quality for each assessment				

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<table>
<tr><td></td><td>/ Sub-heading</td><td>criterion. Rubrics are the most widely applicable assessment tool in competence-based VET because they simultaneously make assessment criteria transparent to learners, enable consistent grading across multiple trainers, and provide a basis for specific, structured feedback.

A well-designed rubric for environmental VET has three essential components: the criteria (what dimensions of performance are being evaluated), the performance levels (how many gradations exist and what each one means), and the descriptors (what specific, observable behaviour distinguishes one level from another).</td><td></td></tr>
<tr><td>2.2</td><td>Table</td><td>Sample rubric — evaluating a Waste Management Plan (2 criteria shown):

<table>
<tr><th>Criterion</th><th>Not Yet Competent (1)</th><th>Competent (2)</th><th>Highly Competent (3)</th></tr>
<tr><td>Accuracy of waste data</td><td>Waste categories are missing or incorrectly identified; no reference to applicable legislation</td><td>At least 4 waste categories correctly identified with reference to applicable classification system; minor gaps in data</td><td>All relevant waste categories correctly identified and classified with precise reference to Albanian/Kosovar legislation; data is complete and verifiable</td></tr>
<tr><td>Feasibility of reduction targets</td><td>No quantified targets provided; actions described are</td><td>At least 2 quantified reduction targets provided; actions</td><td>Quantified targets provided for all major waste streams;</td></tr>
</table>
</td><td>This rubric serves as both a teaching example AND a real tool participants can adapt for their own courses. Include as a downloadable template.</td></tr>
</table>

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			generic or not sector-specific	are sector-relevant but lack timeline or budget considerations	actions are specific, sector-appropriate, include timeline and responsible parties, and are realistic given the institutional context		
		Monitoring and documentation	No monitoring plan; no documentation system described	A basic monitoring schedule is included; documentation format is referenced but not fully specified	A complete monitoring schedule with monthly review points, named responsible parties, KPIs, and a documentation system that can be directly implemented by the institution		
		Regulatory alignment	No reference to relevant regulations; plan would not meet minimum legal	Plan references applicable regulations; meets minimum legal requirements	Plan fully aligned with current Albanian/Kosovar		

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			requirements	**with minor gaps**	**waste management legislation and EU-derived standards; potential compliance risks identified and mitigated**		
2.3	***Paragraph / Subheading***	Observation Checklists for Practical Environmental Assessment An observation checklist is the primary tool for assessing learner performance during practical tasks — workplace simulations, field visits, laboratory exercises, or real on-site activities. Unlike rubrics, which describe gradations of quality, observation checklists typically use binary judgements (demonstrated / not yet demonstrated) for each criterion, making them faster to complete in real-time assessment situations. Observation checklists are particularly valuable in environmental VET because many sustainability competences involve safety-critical behaviours — correct handling of hazardous materials, proper use of PPE, accurate documentation of disposal — where there is no middle ground between correct and incorrect. Either the hazardous material is placed in the right container or it is not. An observation checklist captures these binary competences efficiently and creates a clear, documented record.					
2.3	***Table***	**Sample observation checklist — waste sorting practical task:**					

Observation Criterion	Yes ✓	No ✗	N/A	Notes
Learner puts on appropriate PPE before starting the task				
Learner correctly identifies and separates paper/cardboard waste				

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		Learner correctly identifies and separates glass waste						
		Learner correctly identifies and separates plastic waste						
		Learner correctly identifies and separates organic/food waste						
		Learner correctly identifies and isolates hazardous materials						
		No hazardous materials are placed in general waste containers						
		Learner labels containers correctly after sorting						
		Learner completes a disposal record form accurately						
		Learner stores all containers in the designated area						
		Learner handles all materials safely throughout the task						
		Learner correctly reports any irregularities or safety concerns						
2.4	***Paragraph***	Portfolio Assessment in Environmental VET A portfolio is a purposeful collection of evidence that documents a learner's competence development over time.						

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<table>
<tr><td></td><td>/ Sub-heading</td><td>Unlike a single assessment task, a portfolio captures the journey — not just the destination. It allows both trainers and learners to see how environmental knowledge, skills, and professional attitudes have developed across an entire course, and provides richer, more valid evidence of competence than any single test or task can provide alone.
In environmental VET, portfolio assessment is especially powerful because environmental competence is not always visible in a single task. A learner who performed well on a waste sorting simulation may still lack the consistent professional habit of applying environmental procedures in varied, real-world situations. A portfolio built across multiple tasks, settings, and timeframes provides more robust evidence of genuine competence.</td><td></td></tr>
<tr><td>2.4</td><td>Table</td><td>Recommended portfolio structure for a sustainability-oriented VET course (30–40 hours):

<table>
<tr><th>Portfolio Section</th><th>Content</th><th>Evidence Type</th><th>When Submitted</th></tr>
<tr><td>1. Introduction</td><td>Personal learning goals statement: what the learner expects to develop and why</td><td>Written text (200–300 words)</td><td>Week 1 of course</td></tr>
<tr><td>2. Practical task evidence</td><td>Completed observation checklist from a waste sorting practical task, signed by trainer; photos or video (if permitted)</td><td>Checklist + photos</td><td>After practical task session</td></tr>
<tr><td>3. Knowledge application</td><td>Written case study analysis of an environmental compliance</td><td>Written analysis (400–600 words)</td><td>Mid-course</td></tr>
</table>
</td><td></td></tr>
</table>

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			scenario; includes reference to applicable regulations				
		4. Project work	Draft waste reduction plan for a real or simulated workplace; includes data, targets, and monitoring schedule	Written document following provided template	Final week of course		
		5. Reflection entries	Minimum 3 short reflective journal entries (one early, one mid-course, one final) using a structured prompt	Written entries (150–200 words each)	Ongoing throughout course		
		6. Feedback record	Copies of trainer feedback received on at least two tasks; learner response/action taken	Feedback forms + learner annotation	Ongoing throughout course		
		7. Self-assessment	Final self-assessment against the course learning outcomes using a structured form	Completed self-assessment form	Final week of course		
2.	***Statement***	***"A rubric shared with a learner before the task begins is not just an assessment tool — it is a teaching tool. It tells the learner exactly what professional excellence looks like before they attempt to achieve it."***					

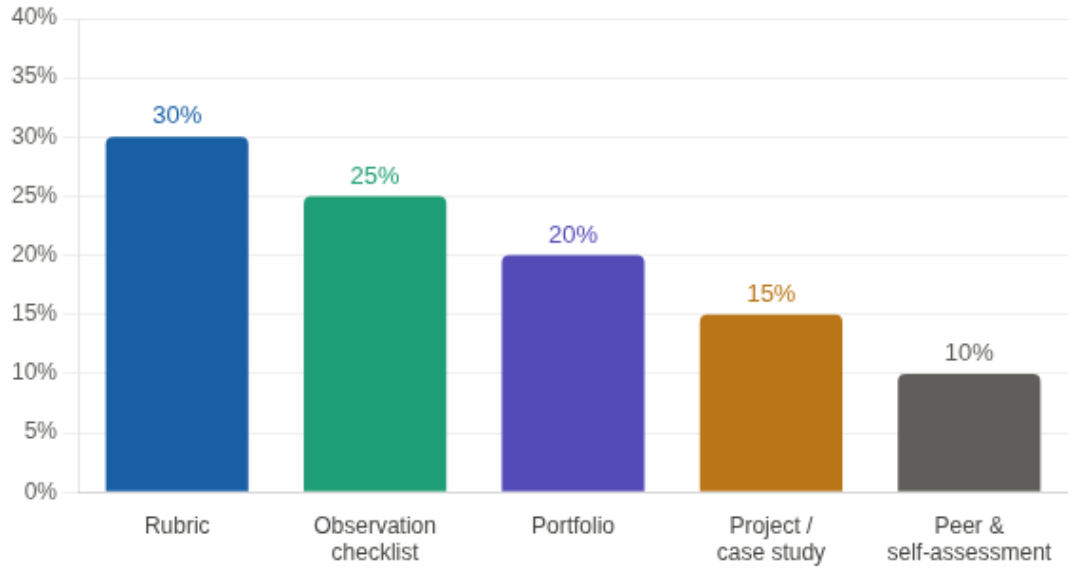
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3.	***List***	Topic 2 — Assessment Tools Quick Reference • Performance indicator: specific, observable, criterion-based statement defining what "competent" looks like • Rubric: multi-level evaluation grid with descriptors for Not Yet Competent / Competent / Highly Competent • Observation checklist: binary (yes/no) criterion list for real-time practical task assessment • Portfolio: structured collection of evidence documenting competence development over time • Rubrics work best for: project work, written analyses, presentations, plan documents • Checklists work best for: practical tasks, workplace simulations, safety-critical procedures • Portfolios work best for: long-term competence development, professional reflection, cross-course evidence	***Use a bulleted list***

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4.	***Chart***	 Source: CEDEFOP competence-based VET best practice guidance · WARP Module 13 — Topic 2	***Use a bar chart***
	Di-vider	**—— CONTINUE: Topic 3 — Digital Tools for Environmental Learning Assessment ——**	

TOPIC 3: Digital Tools for Environmental Learning Assessment

Module 1:
Topic 3: Digital Tools for Environmental Learning Assessment

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<table>
<tr><th>Module number & title</th><th>Content type</th><th>Content development</th><th>Notes</th></tr>
<tr><td>3.1</td><td>Paragraph / Heading</td><td>Why Digital Tools Matter for Sustainability Assessment
Digital tools do not replace well-designed assessment practices — they enable those practices to be implemented more efficiently, consistently, and at greater scale. When a VET institution uses digital assessment tools thoughtfully, several concrete improvements follow: trainers can store and retrieve assessment evidence without managing physical paper files; learners can access feedback, track their own progress, and build professional documentation portfolios they can use beyond the course; coordinators can monitor quality trends across entire cohorts and multiple course cycles; and external evaluators for accreditation or quality audit purposes have access to structured, retrievable records.

For VET providers in Albania and Kosovo, the practical barriers to digital assessment adoption are real — not all institutions have reliable internet, not all trainers are comfortable with digital platforms, and not all learners have equal access to devices. This section addresses these realities directly, providing a graduated approach that allows institutions at any stage of digital readiness to improve their assessment practices.</td><td></td></tr>
<tr><td>3.1</td><td>Table</td><td>Digital readiness levels and recommended first steps for VET institutions:

<table><tr><th>Readiness Level</th><th>Current Situation</th><th>Recommended First Digital Step</th></tr><tr><td>Basic</td><td>Paper-based assessment only; no LMS; limited device access for learners</td><td>Create a Google Form rubric or Word/Excel scoring template; share via email or USB; store completed forms in a named folder</td></tr></table></td><td>Use this table as a self-assessment tool: participants identify their institution's current level and select their first</td></tr>
</table>

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		Intermediate	**Some digital tools in use (email, Word); inconsistent use across trainers**	**Introduce a shared Google Drive folder as a simple portfolio system; build one shared rubric in Google Sheets accessible to all trainers in the department**		***digital step***
		Developing	**LMS available (Moodle or similar); used for content delivery but not assessment**	**Activate LMS assignment submission for one sustainability course; deploy one online quiz for knowledge checking; pilot one e-portfolio section per learner**		
		Advanced	**LMS fully in use; online quizzes and assignment submission standard**	**Introduce mobile observation app for field-based practical assessment; create a digital cohort dashboard to track LO achievement across all learners**		
3.2	***Paragraph / Subheading***	Learning Management Systems (LMS) for Environmental Assessment A Learning Management System (LMS) is a digital platform that manages the full cycle of course delivery and assessment: content distribution, assignment submission, quiz administration, grading, feedback, and progress tracking. For VET institutions delivering sustainability-oriented courses, an LMS provides the infrastructure needed to move from paper-based assessment to a documented, transparent, and data-driven system. Moodle is the most widely used open-source LMS globally and the most likely platform available to VET providers in Albania and Kosovo, either through national initiatives or independently hosted installations. Google Classroom is a simpler alternative accessible to any institution with a Google Workspace account				

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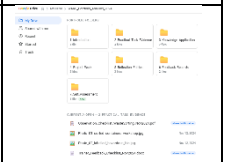
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<table>
<tr><td></td><td></td><td>which is free for educational institutions. Microsoft Teams Education provides similar functionality for institutions using Microsoft 365.</td><td></td></tr>
<tr><td>3.2</td><td>Table</td><td>Key LMS functions for environmental assessment — practical guidance:

<table>
<tr><th>LMS Function</th><th>How to use it for environmental VET assessment</th><th>What it produces</th></tr>
<tr><td>Assignment submission</td><td>Set up assignments for written case analyses, waste management plans, and reflection entries; learners upload directly</td><td>Centrally stored, date-stamped, retrievable submission records for all learners</td></tr>
<tr><td>Online quiz</td><td>Create knowledge checks on waste regulations, environmental frameworks, and circular economy concepts; set automatic marking</td><td>Instant results per learner and cohort analytics; immediate automated feedback on each question</td></tr>
<tr><td>Rubric grading</td><td>Attach rubric to an assignment; complete rubric scoring online when marking; system calculates weighted total</td><td>Criterion-referenced scores per learner; rubric feedback visible to learner immediately upon release</td></tr>
</table></td><td>Practical tip: Start with assignment submission and one quiz — these two functions alone represent a major improvement over paper-based assessment</td></tr>
</table>

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		Forum / discussion	**Post reflective questions; learners respond and reply to peers; visible to all**	**Documented evidence of analytical thinking and peer interaction in sustainability topics**		
		Grade book	**Automatic aggregation of all scores across quizzes, assignments, and rubric-graded tasks**	**Complete progress record per learner; exportable for institutional quality records**		
		Progress tracking	**Monitor completion rates, quiz attempts, and submission status across the cohort**	**Early identification of learners at risk of not achieving learning outcomes; basis for targeted intervention**		
3.3	***Paragraph / Subheading***	E-Portfolios for Documenting Environmental Learning An e-portfolio is the digital equivalent of a physical portfolio — a structured, learner-managed collection of evidence, reflections, and feedback that documents competence development over time. The key advantages of e-portfolios over paper portfolios are: accessibility (available anywhere with an internet connection), persistence (records are not lost or damaged), multi-media capability (can include photos, videos, and documents), and shareability (can be shared with employers, qualification bodies, or institutional quality reviewers). For environmental VET, e-portfolios are particularly valuable because they allow learners to document evidence that cannot easily be captured in a written submission: photographs of correctly sorted waste, video recordings of safety procedure compliance during a field visit, annotated maps of a waste audit walk-through. This multi-modal evidence is closer to real professional documentation than any written test could ever be.			

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<table>
<tr><td></td><td></td><td>Institutions with limited technical resources can implement a simple e-portfolio system using Google Drive: each learner has a named folder shared with their trainer, organised into sections mirroring the portfolio structure described in Topic 2. While less sophisticated than dedicated platforms like Mahara, this approach is zero-cost, reliable, and already familiar to most trainers and learners.</td><td></td></tr>
<tr><td>3.4</td><td>Paragraph / Subheading</td><td>Mobile Tools for Field-Based Assessment
Many of the most important environmental competences can only be genuinely assessed in field conditions — at a construction site, in a production facility, during a waste collection round, or on an environmental inspection. These competences require trainers to go beyond the classroom and conduct structured observation assessments in real workplace settings. Mobile tools make this practical: a trainer with a smartphone and a pre-loaded Google Form can conduct a rigorous, criterion-referenced observation assessment in the field, with results automatically stored and timestamped.</td><td></td></tr>
<tr><td>3.4</td><td>Table</td><td>Step-by-step guide to setting up a mobile field assessment tool using Google Forms:

<table>
<tr><th>Step</th><th>Action</th><th>Result</th></tr>
<tr><td>1</td><td>Open Google Forms; create a new form titled "Waste Sorting Practical — Observation Checklist [Date]"</td><td>Blank form ready for customisation</td></tr>
<tr><td>2</td><td>Add a dropdown question: "Learner name" — list all learner names</td><td>Identifies whose performance is being recorded</td></tr>
<tr><td>3</td><td>For each criterion in the checklist, add a multiple choice question with options "Demonstrated" / "Not yet</td><td>Binary criterion-referenced scoring per observable behaviour</td></tr>
</table></td><td>This approach requires no additional platforms or budget — only a Google account that is free for educators</td></tr>
</table>

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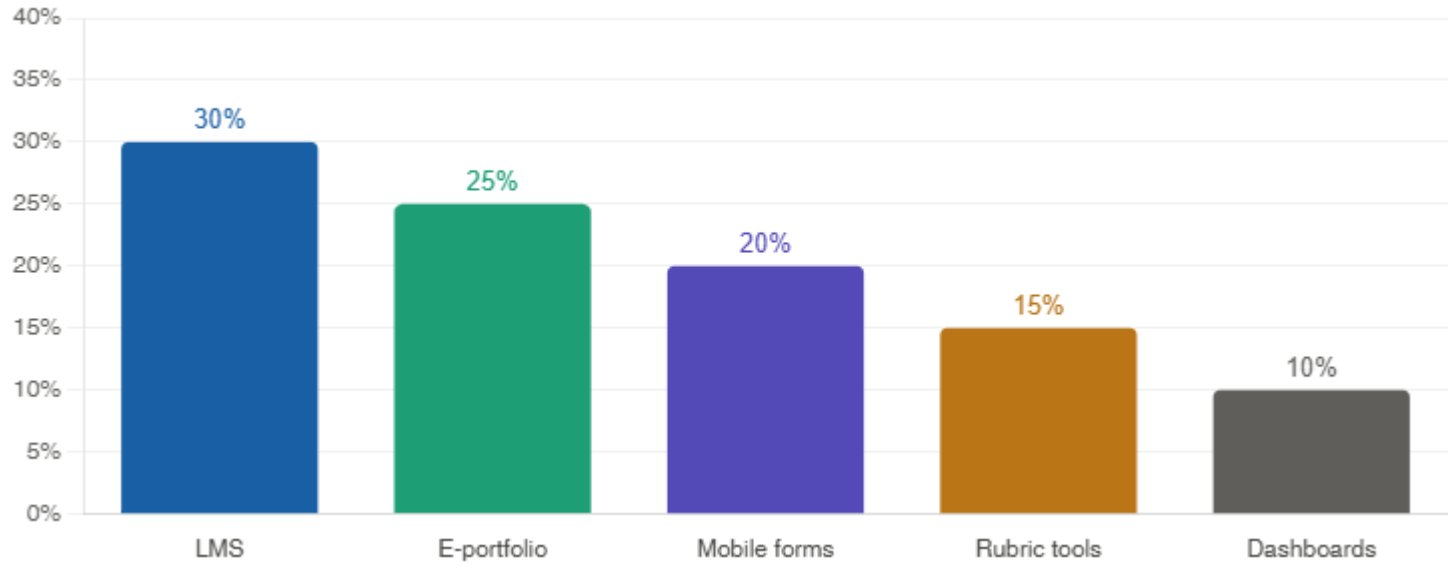
			demonstrated" / "N/A"		
		4	**Add a short text question after each criterion: "Notes (if not demonstrated, specify what was observed)"**	**Captures specific evidence for feedback and record**	
		5	**Add a final free text question: "Overall summary and priority improvement point"**	**Enables immediate structured feedback documentation**	
		6	**Click "Send" → link → shorten URL or create QR code; load on smartphone**	**Form is accessible offline if pre-loaded; QR code allows quick access at assessment location**	
		7	**After the session, open the linked Google Sheet to see all responses; share with learner via email or Drive**	**Automatically compiled, date-stamped assessment record for all learners**	
3.5	***Paragraph / Subheading***	Data Protection and Ethical Responsibilities in Digital Assessment All digital assessment systems that store personal learner data — names, scores, submitted work, video recordings, photographs — are subject to legal and ethical obligations that VET trainers must understand and respect. In Albania and Kosovo, personal data protection legislation governs how learner data must be stored, processed, and shared. Where EU-funded projects are involved, GDPR (General Data Protection Regulation) principles also apply. Four practical obligations apply to any trainer using digital assessment tools: • Inform learners: Before using any digital assessment tool that stores personal data, inform learners				***Data protection compliance is not optional — it is a legal requirement and a professional responsibility***

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		what data is collected, how it is used, how long it is stored, and who has access to it. • Minimise data: Collect only the data you actually need for assessment purposes. A photograph of a sorted waste container is legitimate assessment evidence; a photograph of a learner's face is not necessary for most assessment purposes. • Secure storage: Store assessment data in password-protected systems. Do not use personal social media accounts, unencrypted USB drives, or public cloud folders to store learner assessment records. • Respect learner rights: Learners have the right to access their own assessment records, to correct inaccurate information, and to request deletion of their data after they leave the programme. Know how to handle such requests.	
2.	***Statement***	***"Digital tools improve transparency, consistency, and reach of assessment — but they only work if the underlying assessment design is solid. A poorly designed rubric in an LMS is still a poorly designed rubric."***	
3.	***List***	Topic 3 — Digital Tools Quick Reference • LMS (Moodle, Google Classroom, MS Teams): assignment submission, quizzes, rubric grading, grade book, progress tracking • E-portfolio (Mahara, Google Drive folder, Padlet): long-term evidence collection, multi-modal documentation, professional showcase • Mobile observation tool (Google Forms + QR code): field-based, real-time, criterion-referenced practical assessment • Online rubric builder (Rubistar, Google Forms + Sheets): consistent, shareable, criterion-referenced grading tools • Digital dashboard (Excel, LMS analytics): cohort-level progress monitoring, LO achievement tracking, trend identification • Start where you are: every institution can implement at least one digital improvement using free tools already available	***Use a bulleted list***

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4.	***Chart***		***Use a bar chart; discuss with participants which tools are already available in their institution***
	Divider	**—— CONTINUE: Topic 4 — Feedback, Reflection, and Continuous Quality Improvement ——**	

TOPIC 4: Feedback, Reflection, and Continuous Quality Improvement

Module 1: **Topic 4: Feedback, Reflection, and Continuous Quality Improvement**			
Module number & title	**Content type**	**Content development**	**Notes**

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<table>
<tr><td>4.1</td><td>Para-graph / Heading</td><td>Feedback as a Professional Tool, Not an Afterthought
In traditional VET practice, feedback is often an afterthought — a brief verbal comment or a numerical score written at the bottom of a submitted assignment. In competence-based and outcome-oriented education, feedback is a professional tool as important as any rubric or checklist. It is the primary mechanism through which assessment results become actionable: it tells the learner specifically what they did well, what fell short of the standard, and — most critically — what they need to do differently to develop their competence further.

Poorly designed feedback is worse than no feedback at all. Vague comments like "Good work" or "Could be better" provide learners with no information they can act upon. Comparative feedback ("You performed below average") damages motivation without indicating a path to improvement. Feedback that arrives three weeks after a task, when the learner has moved on to a different topic, has minimal impact on learning.

Effective feedback in sustainability-oriented VET has five characteristics that distinguish it from superficial commentary:</td><td></td></tr>
<tr><td>4.1</td><td>Table</td><td>
<table>
<tr><th>Characteristic</th><th>What it means</th><th>Example in environmental VET</th></tr>
<tr><td>Timely</td><td>Given while the learner can still act on it — not weeks later</td><td>Verbal feedback on waste sorting performance given immediately at the end of the practical task, before the session closes</td></tr>
<tr><td>Specific</td><td>Refers to concrete observable behaviours — not general impressions</td><td>"You correctly separated all five dry waste categories, but you placed used cooking oil in the general waste container</td></tr>
</table>
</td><td>Use the "before/after" format in workshop: show an example of poor feedback, then a revised version using these five characteristics</td></tr>
</table>

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				— this is a hazardous material under Article 8 of the Albanian Waste Law"		
		Criterion-referenced	**Linked explicitly to the stated performance criteria — not comparison with peers**	**"Based on Criterion 3 of the rubric (Regulatory Alignment), your waste management plan meets the Competent level because you reference the correct legislation, but does not yet reach Highly Competent because the compliance risk section is missing"**		
		Forward-looking	**Tells the learner what to do next — not just what went wrong**	**"To reach Highly Competent on the next submission, add a section identifying at least two potential compliance risks and the preventive measures the institution should take"**		
		Two-way	**Invites learner response and reflection — not a one-way transmission**	**"What part of the task did you find most challenging? What would you do differently if you attempted it again?"**		
4.2	***Paragraph /***	Self-Assessment and Peer Assessment in Environmental VET Self-assessment and peer assessment are not "softer" alternatives to trainer evaluation — they are				

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<table>
<tr><td></td><td>Subhead-ing</td><td>competence development tools in their own right. When a VET learner evaluates their own performance against explicit criteria, they develop metacognitive awareness: the capacity to observe their own professional practice, identify where they fall short of a standard, and take ownership of their own development. These are exactly the professional qualities needed in environmental roles where self-directed compliance monitoring is essential.

When a learner evaluates a peer's work using a shared rubric, they deepen their understanding of the performance criteria — often more effectively than through reading or listening. They also develop the analytical and communication skills required for professional peer review, quality inspection, and team-based problem-solving.</td><td></td></tr>
<tr><td>4.2</td><td>Table</td><td>Practical formats for self- and peer assessment in environmental VET:

<table>
<tr><th>Format</th><th>How to use it</th><th>What it develops</th></tr>
<tr><td>Structured self-evaluation form</td><td>Learner rates own performance on each rubric criterion (1–3) and writes a one-sentence justification for each rating; submits alongside their work</td><td>Honest critical reflection; accuracy of self-perception; alignment of self-perception with trainer evaluation</td></tr>
<tr><td>Reflective learning journal</td><td>After each major task or session, learner writes 150–200 words responding to structured prompts (What did I do? What did I learn? What would I change?)</td><td>Metacognitive awareness; professional identity development; ongoing learning habit</td></tr>
</table>
</td><td></td></tr>
</table>

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		Peer review using shared rubric	**Learner A evaluates Learner B's waste management plan using the same rubric used by the trainer; writes specific, criterion-referenced feedback; Learner B responds to the feedback**	**Understanding of quality criteria; analytical skills; constructive professional communication**		
		Gallery walk	**Learners post their work (waste reduction plans, compliance checklists) on classroom walls or on a shared digital platform; all learners leave written feedback notes using a structured prompt**	**Exposure to varied approaches; peer learning; ability to compare and evaluate quality across examples**		
		Group debrief	**After a collaborative task, the full group reflects together on what worked, what was challenging, and what to do differently; trainer facilitates, does not lead**	**Collective learning; shared ownership of quality; collaborative problem-solving**		
4.3	***Paragraph /***	Using Assessment Data to Improve Courses: Closing the Quality Loop Individual feedback serves the individual learner. Aggregated assessment data — patterns across an entire cohort, tracked over multiple course cycles — is the most powerful tool a VET institution has for				

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<table>
<tr><td></td><td>Subhead-ing</td><td>improving the quality of its courses. When 70% of learners in a cohort score below the Competent level on the same rubric criterion, this is not evidence that 70% of learners failed to learn. It is evidence that this particular topic, skill, or task was not taught or practised adequately, and that the course design needs to change.

This principle — using assessment outcomes to improve teaching rather than to judge learners — is at the heart of the EQAVET quality assurance framework and of all serious approaches to VET quality management. It transforms assessment from a measurement exercise into a learning system.</td><td></td></tr>
<tr><td>4.3</td><td>Table</td><td>Diagnostic use of assessment data — patterns and responses:

<table>
<tr><th>Pattern observed in assessment data</th><th>What it signals about teaching quality</th><th>Recommended curricu-lum response</th></tr>
<tr><td>Majority of learn-ers score below Competent on the same rubric crite-rion</td><td>That specific compe-tence was insuffi-ciently taught, prac-tised, or modelled during the course</td><td>Redesign the teaching activity for that LO; add a dedicated practice ses-sion; share worked ex-amples of Competent performance before the assessment</td></tr>
<tr><td>High scores on knowledge quizzes, consistently low scores on practical tasks</td><td>Learning is happen-ing at recall level but not translating into professional skill</td><td>Reduce lecture time; in-crease time for practical exercises, simulations, and real-task practice; introduce worked exam-ples before assessment</td></tr>
</table></td><td>This table can be used as a struc-tured peer discus-sion exercise: share cohort data with participants and ask them to identify patterns and pro-pose responses</td></tr>
</table>

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		Significant variation in scores across trainers using the same rubric	**Rubric descriptors are ambiguous; assessment criteria are being interpreted differently across trainers**	**Conduct a calibration/standardisation session; review and refine rubric descriptors; develop shared annotated worked examples for each performance level**		
		Learners consistently underestimate their own performance in self-assessment	**Lack of confidence; possibly unclear understanding of what the criteria mean in practice**	**Provide positive worked examples before self-assessment; discuss criteria explicitly in class before the task; give formative feedback mid-task, not only at the end**		
		Performance declining across the course (stronger at start, weaker at end)	**Curriculum sequence is not building skills progressively; later topics may be too complex without sufficient scaffolding**	**Review topic order; ensure earlier topics fully develop prerequisite skills; introduce bridging activities between foundational and advanced content**		
		Cross-institutional comparison shows consistent gaps between Albanian	**Possible differences in teaching practice, available resources, or regulatory context between the two**	**Share teaching materials and worked examples across institutions; conduct joint trainer cali-**		

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		and Kosovar results on the same LO	**countries**	**bration sessions; investigate contextual differences**	
4.4	***Paragraph / Subheading***	Aligning Assessment with EQAVET and European Quality Standards The European Quality Assurance in Vocational Education and Training (EQAVET) framework provides a set of quality indicators and descriptors directly relevant to the assessment practices addressed in this module. For VET institutions in Albania and Kosovo, familiarity with EQAVET is increasingly important as both countries advance their EU integration processes — institutions that can demonstrate EQAVET-aligned assessment practices are better positioned for Erasmus+ partnerships, international recognition, and eventual qualification portability. The following EQAVET quality indicators are directly addressed by the assessment practices developed in this module:	
4.4	***Table***	**EQAVET Indicator** / **What it requires** / **How this module addresses it** **Indicator 1** / **VET providers use learning outcomes in the planning and delivery of teaching and assessment** / **Topic 1 establishes the link between LOs, performance indicators, and assessment design; Topic 2 provides tools that operationalise LOs in rubrics and checklists** **Indicator 3** / **Participation rates, completion rates, and placement of learners in em-** / **Topic 3 introduces digital dashboards and LMS analytics that enable systematic track-**	*Reference: EQAVET Quality Indicators (2020 Recommendation). Available at eqavet.eu*

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			ployment or further learning are measured	ing of participation, completion, and competence achievement		
		Indicator 5	Learning outcomes are formally certified and recognised	Topics 2 and 3 develop assessment tools (portfolios, rubrics, e-documentation) that produce certifiable evidence of competence aligned with national qualification frameworks		
		Indicator 6	Assessment includes feedback mechanisms for learners and trainers	Topic 4 provides a complete framework for timely, specific, criterion-referenced feedback and for using aggregated assessment data to improve courses		
		Indicator 7	Teachers and trainers are supported to develop their pedagogical and assessment competences	The entire module supports professional development of VET trainers as assessors; Activities A6–A8 develop real assessment tools applicable in practice		
4.	*Timeline*	Assessment Quality Development — Implementation Timeline				
		Phase 1 Months 1–3	Conduct a course assessment audit. Review all existing assessment tools for one sustainability course. Identify			

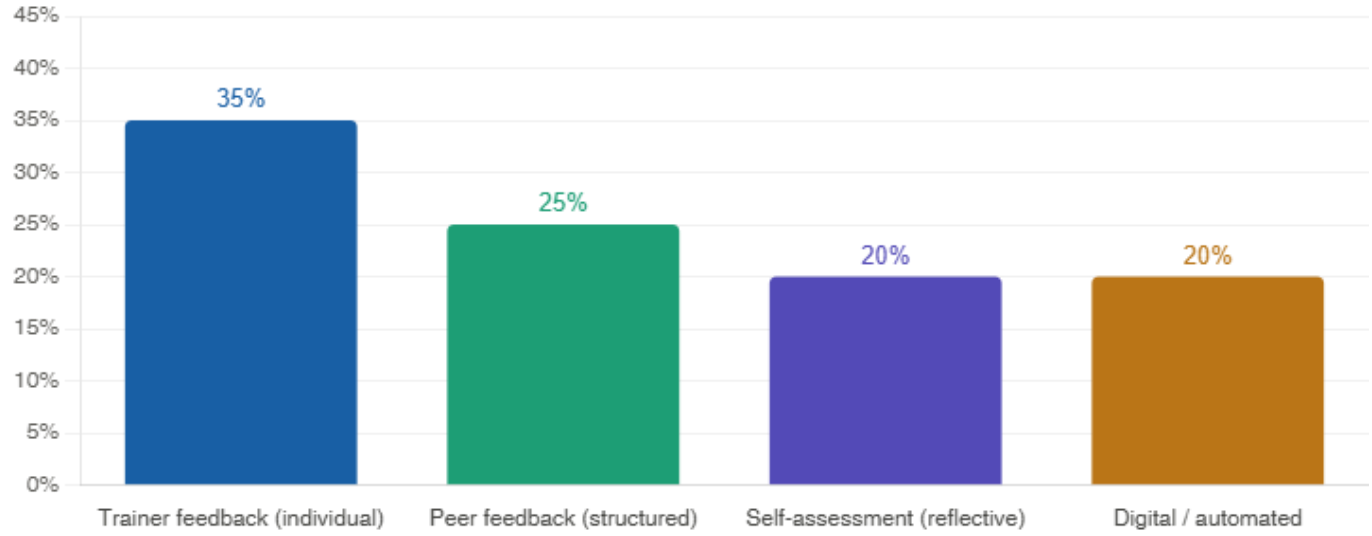
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			gaps against the six quality principles. Develop first rubric for one LO. Share rubric with learners before the assessment task. Collect learner feedback on clarity of criteria.	
		Phase 2 Months 4–6	**Introduce digital tools. Activate LMS assignment submission for one course. Deploy one knowledge quiz. Pilot a Google Drive portfolio folder with one cohort. Conduct first mobile field observation using Google Forms checklist. Compare results with partner institution in Albania or Kosovo.**	
		Phase 3 Months 7–9	**Integrate feedback and self-assessment. Introduce structured self-evaluation form for learners after one major task. Introduce peer review of one written assignment using shared rubric. Conduct first cohort-level data analysis. Identify top 2 curriculum improvements.**	
		Phase 4 Months 10–12	**Full integration and quality review. Apply revised assessment system across all sustainability courses. Produce cohort performance report. Share improved tools with WARP partner network. Document improvements for institutional quality record and EQAVET alignment.**	
2.	***Statement***	***"Quality assurance is not an external inspection that happens to you — it is a professional habit you build into every course, every assessment, and every feedback conversation."***		
3.	***List***	Topic 4 — Feedback and Quality Improvement Quick Reference • Effective feedback: timely / specific / criterion-referenced / forward-looking / two-way • Self-assessment develops metacognitive awareness and professional ownership of learning		*Use a bulleted list; deploy as a module summary card*

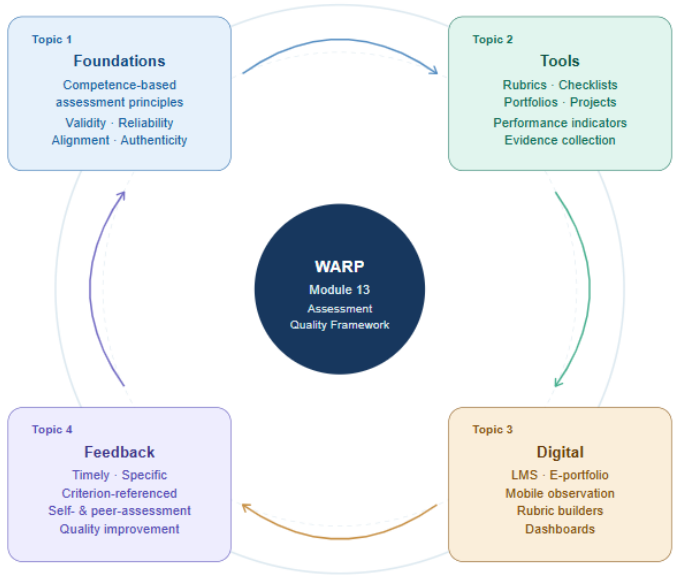
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		• Peer assessment deepens understanding of quality criteria and develops analytical skills • Assessment data is a teaching tool — use cohort patterns to improve courses, not to judge learners • EQAVET Indicators 1, 3, 5, 6, 7 are directly addressed by competence-based assessment practices • Quality improvement is a cycle: Teach → Assess → Analyse data → Improve teaching → Teach again	
4.	***Chart***		*Use a pie or bar chart; discuss: what is the current distribution in your institution?*
5. Image	***Image***	The WARP Assessment Quality Framework The diagram below illustrates the integrated framework connecting all four topics of this module: from foundational principles (Topic 1) through tool design (Topic 2) and digital implementation (Topic 3) to feedback and continuous improvement (Topic 4).	

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5. Activities

(the following are proposals for the activities of the unit)

Module 1: **Evaluating and Assessing Environmental Learning Outcomes**			

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<table>
<tr><th>Module number & title</th><th>Activity type</th><th>Activity development</th><th>Notes</th></tr>
<tr><td>Topic 1 A1</td><td>Flashcards</td><td>Topic 1 — Key Concepts Flashcard Set (10 cards)
<table>
<tr><th>#</th><th>Front (Term)</th><th>Back (Definition + Example)</th></tr>
<tr><td>1</td><td>Competence-Based Assessment (CBA)</td><td>Evaluation focused on whether a learner can demonstrate professional competence — integrating knowledge, skills, and attitudes — in realistic conditions. Example: assessing whether a learner can conduct a site waste audit, not just explain what one is.</td></tr>
<tr><td>2</td><td>Performance Indicator</td><td>A specific, observable statement describing what a learner must demonstrate to confirm achievement of a learning outcome. Example: "In a timed task, learner correctly separates 5+ waste categories with zero hazardous material placement errors."</td></tr>
<tr><td>3</td><td>Validity</td><td>The principle that an assessment tool measures what it claims to measure. Example: a practical sorting task is a valid measure of sorting skill; a written test about sorting categories is not.</td></tr>
</table></td><td>Flashcard 1–10: Front = Term (text); Back = Definition + Example (text). Deploy as digital flashcards on OER platform or print and laminate for workshops.</td></tr>
</table>

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		4	Reliability	The principle that assessment produces consistent results regardless of who administers it. Example: two trainers independently applying the same rubric reach the same conclusion about the same learner's performance.		
		5	Alignment	The principle that learning outcomes, teaching activities, and assessment tools form a coherent, consistent system. Example: if the LO requires designing a plan, the teaching includes plan design practice and the assessment requires producing a plan.		
		6	The Assessment Cycle	A four-stage continuous process: Design → Implement → Evaluate & Feedback → Improve. Assessment is not a single end-of-course event but an ongoing quality process embedded in teaching.		
		7	Formative Assessment	Ongoing evaluation during learning, designed to provide feedback and guide improvement — not primarily to produce a grade. Example: mid-		

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				course practical observation with immediate verbal feedback.	
			8	**Summative Assessment**	**Evaluation at the end of a learning unit to certify whether a learner has achieved the required competence level. Example: final portfolio submission evaluated against all stated learning outcomes.**
			9	**NAVETQ**	**National Agency for Vocational Education and Training and Qualifications — Albania's national authority for VET qualification standards, framework alignment, and quality assurance.**
			10	**EQAVET**	**European Quality Assurance in Vocational Education and Training — a European reference framework providing quality indicators and descriptors for VET systems.**
Topic 1 A2	***Multiple choice***	Topic 1 — Knowledge Check: Multiple Choice Questions 1–5 Q1: What is the fundamental difference between knowledge-based and competence-based assessment in VET? A) Knowledge-based assessment is longer and more difficult B) Competence-based assessment evaluates whether a learner can perform professional tasks, not just recall information C) Competence-based assessment does not use written tests at any point			***Specify correct answers: B, C, B, B, C. Deploy on LMS; pass mark 80%; two attempts allowed.***

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		D) Knowledge-based assessment is more aligned with European standards ✓ Correct answer: B *Feedback: Correct. Competence-based assessment focuses on professional performance — the integration of knowledge, skills, and appropriate attitudes in realistic conditions. Recall alone is insufficient evidence of vocational competence.* Q2: A VET trainer uses a 50-question written test as the only assessment method for a 40-hour waste management course. Which quality principle is most clearly violated? A) Reliability B) Transparency C) Validity D) Inclusiveness ✓ Correct answer: C *Feedback: Correct. A written test cannot provide valid evidence of the practical skills and professional behaviours required in waste management work. The assessment does not measure what the course intended to develop.* Q3: Which of the following best describes the "alignment" principle in assessment design? A) All trainers give the same percentage of learners a passing grade B) Learning outcomes, teaching activities, and assessment tools form a coherent and consistent system C) Assessment results are aligned with national average scores D) Learners receive feedback within the same timeframe ✓ Correct answer: B *Feedback: Correct. Alignment means the three elements of a course — what you want learners to achieve (LOs), how you teach (activities), and how you assess (tools) — are mutually consistent. If they are misaligned, you cannot reliably achieve or verify the intended learning.*	

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<table>
<tr>
<td></td>
<td></td>
<td>Q4: In the assessment cycle, what is the purpose of the "Improve" stage?
A) To re-test learners who failed the first assessment
B) To use aggregated assessment data to identify gaps in teaching and revise the course for the next cycle
C) To improve individual learner scores through additional tasks
D) To update the course registration documentation
✓ Correct answer: B
Feedback: Correct. The Improve stage closes the quality loop: assessment data is analysed not to judge learners, but to identify where teaching fell short of developing the intended competences — and to change the course accordingly.

Q5: Which assessment gap is most commonly identified in VET institutions across Albania and Kosovo?
A) Over-reliance on portfolio assessment
B) Excessive use of project-based assessment tasks
C) Dependence on written tests with no practical task assessment
D) Inconsistent use of e-portfolio platforms
✓ Correct answer: C
Feedback: Correct. Field observations in the WARP project confirm that written tests — often knowledge recall only — remain the dominant assessment method in sustainability-related VET courses in both countries, with practical task assessment largely absent.</td>
<td></td>
</tr>
<tr>
<td>Topic 1 A3</td>
<td>Matching</td>
<td>Topic 1 — Matching: Assessment Principles and Definitions
<table>
<tr><th>Term</th><th></th><th>Match</th></tr>
<tr><td>Validity</td><td>→</td><td>The assessment tool measures the actual intended competence</td></tr>
<tr><td>Reliability</td><td>→</td><td>Two trainers using the same rubric reach</td></tr>
</table></td>
<td>Deploy as drag-and-drop matching on OER platform</td>
</tr>
</table>

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				the same conclusion	
		Transparency	→	**Learners receive and understand the assessment criteria before the task**	
		Authenticity	→	**The task takes place in a real or simulated professional environment**	
		Alignment	→	**LOs, teaching activities, and assessment tools are mutually consistent**	
		Inclusiveness	→	**Assessment methods accommodate learners with different needs and backgrounds**	
		Formative assessment	→	**Ongoing evaluation designed to guide learning improvement, not produce a final grade**	
		Summative assessment	→	**End-of-course evaluation certifying whether a learner has reached the required competence level**	
Topic 2 A4	***Multiple answer***	Topic 2 — Multiple Answer: Assessment Tools Q6: Which of the following are characteristics of a well-designed rubric for environmental VET? (Select all that apply) A) Uses observable, specific performance descriptors for each level ✓ B) Shared with learners before the assessment task begins ✓ C) Has at least 3 performance levels with clearly distinct descriptors ✓ D) Based on comparison with other learners' performance ✗ E) Directly linked to stated learning outcomes ✓ ✓ Correct answers: A, B, C, E			*Specify correct answers: Q6: A,B,C,E | Q7: A,B,D,E | Q8: A,B,C,E. Set partial credit.*

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		Q7: Which types of evidence are appropriate for a portfolio in an environmental VET course? (Select all that apply) A) Completed observation checklist from a practical task ✓ B) Photograph of correctly sorted waste containers from a field visit ✓ C) Trainer's personal notes about the learner's personality ✗ D) Written self-reflection entry after a case study analysis ✓ E) Completed waste management plan with trainer feedback annotation ✓ ✓ Correct answers: A, B, D, E Q8: A trainer is designing an observation checklist for a waste sorting practical task. Which features should the checklist have? (Select all that apply) A) Criterion-based items describing specific observable behaviours ✓ B) Binary scoring (demonstrated / not yet demonstrated) for safety-critical criteria ✓ C) A section for the trainer to record specific observational notes ✓ D) A score that compares the learner to the best performer in the group ✗ E) Clear instructions for what to do when a criterion is "not yet demonstrated" ✓ ✓ Correct answers: A, B, C, E	
Topic 2 A5	***Fill in the blank***	Topic 2 — Fill in the Blank: Assessment Tool Design Word bank: rubric / observation checklist / portfolio / performance indicator / criterion / descriptor / binary / competent / authentic / aligned 1. A _____ is a specific, observable statement that describes exactly what a learner must demonstrate to confirm they have achieved a learning outcome. *Answer: performance indicator* 2. A _____ is a structured evaluation tool that describes multiple levels of performance quality for each assessment criterion, making grading transparent and consistent. *Answer: rubric*	*Specify answers: 1-performance indicator, 2-rubric, 3-observation checklist, 4-portfolio, 5-performance indicator, 6-criterion, 7-descriptor, 8-authentic, 9-*

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		3. An _____ uses binary scoring (demonstrated / not yet demonstrated) and is particularly suited to safety-critical practical tasks in environmental VET. *Answer: observation checklist* 4. A _____ is a purposeful collection of evidence documenting a learner's competence development over time, providing richer evidence than any single task. *Answer: portfolio* 5. The statement "Correctly separates 5+ waste categories in a timed task with zero hazardous material errors" is an example of a strong _____. *Answer: performance indicator* 6. Each row in a rubric represents one _____ — a specific dimension of the performance being evaluated. *Answer: criterion* 7. The text in a rubric cell that describes what performance at a specific level looks and sounds like is called a _____. *Answer: descriptor* 8. Assessment is considered _____ when it requires learners to perform tasks that reflect genuine professional situations in their vocational sector. *Answer: authentic* 9. An assessment system is _____ when the learning outcomes, teaching activities, and assessment tools form a mutually consistent system. *Answer: aligned* 10. A learner who has achieved the expected standard for a vocational learning outcome is considered _____. *Answer: competent*	*aligned, 10-competent*
Topic 2 A6	***Digital map***	Topic 2 — Assessment Tools Audit Map Participants create a digital inventory map of the assessment tools currently in use in their institution, categorised by type. The purpose is to make visible — often for the first time — the actual distribution of assessment methods across courses, and to identify the most significant gaps relative to competence-based best practice.	*Output: a digital or paper map shared with the training group; basis for the*

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		• List all assessment tools currently used across your institution's sustainability-related VET courses (written tests, rubrics, practical tasks, portfolios, checklists, etc.) • For each tool, note: which LOs it assesses, whether criteria are shared with learners before assessment, and whether it produces certifiable evidence of competence • Categorise your tools against the six quality principles: which tools score well on validity, reliability, transparency, authenticity, alignment, and inclusiveness? Which do not? • Create a simple visual summary (table, pie chart, or diagram) showing your current tool distribution vs. the best-practice distribution from Topic 2 • Identify your top two priority improvements and share with your partner institution for comparison	*hackathon activity (A8)*
Topic 3 A7	***Multiple choice***	Topic 3 — Knowledge Check: Digital Tools (Questions 9–12) Q9: A VET trainer wants to conduct a structured observation assessment during a field visit to a waste treatment facility. Which digital tool is most practical for this purpose? A) A desktop LMS platform accessed via laptop B) A Google Form loaded on a smartphone and accessible via QR code C) A social media group for sharing photos D) An email thread with the learner's name and a tick box ✓ Correct answer: B *Feedback: Correct. A Google Form pre-loaded on a smartphone is the most practical mobile assessment tool — it is free, works with or without internet connectivity if pre-loaded, automatically stores responses, and produces a timestamped record.* Q10: Which LMS function is most directly useful for monitoring whether learners are achieving a specific environmental learning outcome across an entire cohort? A) The discussion forum B) The course description page	*Specify correct answers: Q9: B, Q10: C, Q11: B, Q12: B*

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		C) The grade book and progress tracking analytics D) The course calendar ✓ Correct answer: C *Feedback: Correct. Grade book and progress tracking analytics aggregate individual learner results by LO across the full cohort, allowing trainers to identify patterns — such as consistently low performance on a specific sustainability criterion — that signal a need to improve teaching.* Q11: A trainer collects photographic evidence of learner performance during a practical waste sorting task and stores it in a shared Google Drive folder. Which data protection principle applies? A) Photographs of workplace activities are not personal data and require no protection B) Learners must be informed of what data is collected, how it is used, and how long it is stored C) All photographic evidence must be deleted immediately after grading D) Data protection principles do not apply to educational institutions ✓ Correct answer: B *Feedback: Correct. Images of identifiable learners are personal data under applicable data protection legislation. Learners must be informed of the purpose, use, storage, and access rights associated with their assessment data, regardless of the format.* Q12: Which of the following best describes the purpose of a digital learner portfolio in environmental VET? A) A digital copy of the written test for record-keeping purposes B) A collection of multi-modal evidence documenting competence development across tasks and time C) A social media profile showcasing the learner's personal achievements D) A backup of the course PowerPoint slides ✓ Correct answer: B	

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		Feedback: Correct. A digital portfolio is a structured, learner-managed collection of diverse evidence — written work, observation records, photographs, reflections, feedback — that documents genuine competence development over the full course duration.	
Topic 3 A8	***Digital simulation***	Topic 3 — Digital Simulation: Assessment System Design Participants navigate an interactive branching scenario in which they must make a sequence of decisions about designing a digital assessment system for a 30-hour sustainability course for food service workers. At each decision point, the simulator provides criterion-based feedback explaining why each choice is or is not appropriate. Scenario brief: You are redesigning the assessment system for a 30-hour food-sector waste management course. The course has three learning outcomes: (1) Apply correct food waste separation procedures; (2) Document waste disposal in compliance with applicable regulations; (3) Propose at least two measurable waste reduction actions for the workplace. Navigate the following decisions: 1. Select the primary assessment method for LO1 (practical sorting skill). [Options: written test / observation checklist / peer review / attendance record] 2. Select a digital tool for collecting and storing assessment evidence. [Options: WhatsApp group / Google Drive portfolio folder / LMS assignment submission / USB drive] 3. Design a feedback mechanism for learners after the practical task. [Options: verbal score only / written criterion-referenced feedback within 48 hours / end-of-course grade / class ranking] 4. Choose how to use cohort assessment data to improve the next course cycle. [Options: ignore results and repeat the same course / compare results against the rubric criteria and identify the lowest-scoring LO / share results publicly / delete data after grading]	*Build as interactive branching scenario on Rise/Articulate or as a structured paper-based decision exercise if digital tools are unavailable*

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		At each step, the simulator provides immediate feedback explaining the quality principles behind each decision. Learners complete a short reflection entry after the simulation.	
Topic 4 A9	***Multiple answer***	Topic 4 — Multiple Answer: Feedback and Quality Improvement (Questions 13–15) Q13: Which characteristics make feedback most useful for learner improvement in environmental VET? (Select all that apply) A) Timely — given while the learner can still act on it ✓ B) Specific — refers to concrete observable behaviours ✓ C) Comparative — tells the learner how they rank against classmates ✗ D) Criterion-referenced — linked to stated performance criteria ✓ E) Forward-looking — tells the learner what to do next ✓ ✓ Correct answers: A, B, D, E Q14: Which of the following represent appropriate uses of cohort-level assessment data in VET quality improvement? (Select all that apply) A) Identifying which specific rubric criterion the majority of learners failed to achieve ✓ B) Comparing institutional average scores across Albanian and Kosovar partner institutions to identify shared gaps ✓ C) Ranking all learners publicly to motivate improvement ✗ D) Deciding to redesign a teaching activity based on consistent low performance on one LO ✓ E) Sharing improved assessment tools with WARP partner network ✓ ✓ Correct answers: A, B, D, E Q15: Which EQAVET quality indicators are directly addressed by competence-based assessment practices? (Select all that apply) A) Indicator 1: Use of learning outcomes in planning and assessment ✓ B) Indicator 3: Tracking of completion rates and learner progression ✓ C) Indicator 5: Formal certification and recognition of learning outcomes ✓	*Specify correct answers: Q13: A,B,D,E | Q14: A,B,D,E | Q15: A,B,C,D*

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		D) Indicator 6: Feedback mechanisms for learners and trainers ✓ E) No EQAVET indicators are relevant to assessment ✗ ✓ Correct answers: A, B, C, D	
Topic 4 A10	***Hackathon***	Topic 4 — Mini Hackathon: Complete Assessment System Redesign This is the capstone activity for the module. Teams of 3–4 participants receive a detailed brief describing an existing, poorly-designed assessment system for a sustainability-oriented VET course (based on the real case study from Topic 1 content). Their task: redesign the entire assessment system from scratch within 2–3 hours, producing a complete, implementation-ready package. Required deliverables: 5. Assessment alignment matrix mapping 3 LOs to teaching activities, assessment tools, evidence types, and feedback methods 6. One complete rubric (4 criteria, 3 performance levels with descriptors) for evaluating a sustainability-related product (waste management plan, compliance report, or circular economy proposal) 7. One observation checklist (minimum 10 criteria) for a practical task specific to the vocational sector 8. A digital documentation plan: which platform, which folder structure, what data is stored, and how learners access their records 9. A feedback protocol: when feedback is given, in what format, and how learner responses are collected Presentation: each team pitches their system in 5 minutes. All participants evaluate each pitch using a shared evaluation rubric provided by the trainer. The most implementation-ready system — as voted by peers — is shared with all participants as a network resource via the WARP partner platform.	*Most effective when participants come from different institutions across Albania and Kosovo — promotes cross-institutional learning and shared standard-setting*

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6. Methodology

5.1. Project-Based Learning (PBL) and collaborative Learning	Project-Based Learning is the primary methodological approach in this unit. Participants engage in individual and collaborative projects — specifically the Rubric Design and Assessment Alignment Plan activities — that require them to produce real, usable assessment tools rather than describe them. This is an intentional methodological choice: the unit is about assessment design, and the most effective way to develop that capacity is to actually design assessment tools, test them with peers, receive feedback, and revise them. Collaborative learning is built into all major activities through peer review, group work, and cross-institutional exchange.
5.2. Collaborative learning between institutions in Albania and Kosovo	A distinguishing feature of this unit is its emphasis on structured cross-institutional comparison and knowledge exchange. Assessment standards in Albania and Kosovo have developed in relative isolation — VET providers in Tirana, Shkodër, Prishtina, and Prizren may use entirely different rubrics, grading scales, and evaluation formats for nominally identical vocational competences. This unit deliberately creates opportunities for participants from Albanian and Kosovar institutions to compare practices, share tools, and begin to develop shared standards. The digital map activity and the group assessment plan are specifically designed to facilitate this exchange.
5.3. Blended Learning	The unit is designed for blended delivery: self-paced online learning through the WARP OER platform covering theoretical content, combined with face-to-face or synchronous online workshop sessions for the hands-on activities (rubric design, assessment alignment plan, case study, hackathon). This structure allows participants to engage with theoretical content at their own pace while using contact time for higher-order tasks that benefit most from peer interaction, discussion, and real-time feedback. All activities have been designed to function in non-digital formats as well, accommodating institutions with limited connectivity or digital infrastructure.

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5.4. Online and mobile Learning tools	Digital tools are integrated throughout the unit both as content (participants learn about digital assessment tools) and as method (the unit itself uses digital tools for delivery and assessment). Participants use LMS assignment submission for portfolio evidence, online quiz tools for knowledge checks, and collaborative platforms for cross-institutional sharing. This dual role is intentional: participants cannot learn about digital assessment tools effectively without direct experience of using them. By the time participants complete the unit, they have hands-on experience of the same digital tools they are learning to apply in their own courses.
5.5. Real case studies	The "Green Skills Gap" case study used in the unit content and the hackathon activity is based on a composite of real situations observed across VET systems in the Western Balkans. It is designed to be immediately recognisable and relatable to participants, creating a safe space in which to identify and discuss assessment quality problems without criticising specific colleagues or institutions. Case-based reasoning is a powerful method for developing the analytical and diagnostic skills that underpin assessment quality improvement in real institutional contexts.
5.6. Visits to companies in the sector	Where institutional resources and partner networks permit, field visits to companies or organisations with formalised environmental assessment systems — such as certified waste management operators, environmental consultancies, or construction companies with ISO 14001 certification — are recommended as a complement to this unit. Observing how professional competence is evaluated in a real workplace setting provides powerful and memorable evidence that competence-based assessment is not a theoretical ideal but a practical standard already in use in the sectors where VET graduates will work.
5.7. Workshops and experiential learning	The two core workshop tasks — the rubric design exercise and the assessment alignment plan — are the experiential heart of this unit. Experiential learning theory suggests that adults learn most effectively when they do something, reflect on the experience, draw conclusions, and then apply those conclusions in a

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	new context. The rubric design and alignment plan tasks follow this cycle: participants design a real tool, receive peer and trainer feedback, identify what to improve, and revise their tool. Trainers facilitating these workshops are encouraged to create a psychologically safe environment where imperfect first attempts are expected and valued — the goal is improvement through iteration, not perfection on the first attempt.
5.8. Community based and participatory approaches	The digital mapping activity connects assessment improvement directly to each participant's local institutional and community context. By mapping existing resources and identifying gaps in their own institutions, participants engage with assessment quality as a practical, immediate, and collective challenge — not as a theoretical concept. The cross-institutional comparison reinforces a community of practice orientation: participants are not isolated teachers struggling with assessment alone, but members of a professional community across Albania and Kosovo that can share knowledge, tools, and standards to collectively raise the quality of sustainability-oriented vocational education.

7. Resources

Possible resources related to the topic of the unit

- **CEDEFOP (2021). Competence-based VET: Concepts and Practice. Available at: cedefop.europa.eu**
- **CEDEFOP (2022). Using Learning Outcomes in VET — A Handbook. Available at: cedefop.europa.eu**
- **European Commission (2017). European Qualifications Framework (EQF). Available at: ec.europa.eu/ploteus/en/info/european-qualifications-framework**
- **European Commission (2020). EQAVET — Recommendation on Quality Assurance in VET. Available at: eqavet.eu**
- **European Training Foundation (2020). GRETA — Greening Responses to Excellence through Thematic Actions. Available at: etf.europa.eu**
- **OECD (2023). Skills for a Green Transition. Available at: oecd.org**

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- **UNESCO (2022). Greening Technical and Vocational Education and Training. Available at: unevoc.unesco.org**
- **CEDEFOP (2023). Green Skills and Environmental Awareness in VET. Available at: cedefop.europa.eu**
- **NAVETQ, Albania — National Qualifications Framework. Available at: navetq.gov.al**
- **Kosovo Qualifications Authority (KQA) — Kosovo Qualifications Framework. Available at: kka-ks.net**
- **MDPI Sustainability Journal — VET Education Studies (open access). Available at: mdpi.com/journal/sustainability**
- **Rubistar — free online rubric builder. Available at: rubistar.4teachers.org**
- **Mahara — open source e-portfolio platform. Available at: mahara.org**
- **Moodle — open source LMS. Available at: moodle.org**

8. Assessment criteria

Include the assessment criteria for this unit. Assessment is competence-based and multi-evidenced. Participants are evaluated on the basis of a portfolio of evidence demonstrating their ability to design, apply, and reflect on assessment systems for environmental learning outcomes. The portfolio must include: completed rubric (A6 output); assessment alignment plan (hackathon output); knowledge check quiz results (A2/A3); and the digital resource map (A6 digital map).

8.1. Use of digital tools

Participant has used at least one digital tool for assessment purposes during the unit — submitting work via LMS, completing an online quiz, contributing to a shared digital platform, or creating a digital portfolio entry. At the higher level: participant has used multiple digital tools, reflects critically on their usability and limitations, and proposes a concrete plan for how they would introduce digital assessment tools in their own institution.

8.2. Understanding the sustainability framework

Participant demonstrates understanding of competence-based assessment principles — validity, reliability, transparency, authenticity, and alignment — as applied to environmental and sustainability learning outcomes in VET. Knowledge check quiz results (A2/A3) provide evidence. At the higher level: participant can explain and justify their assessment design choices with explicit reference to assessment quality principles and European frameworks (EQF, EQAVET).

8.3. Ability to implement real improvements

Participant produces a practical assessment tool (rubric or observation checklist) that is realistic, valid, and directly applicable to a sustainability-related VET course in their sector. The tool includes at least two observable criteria with three clearly distinct performance levels

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linked to real vocational tasks. At the higher level: peer review confirms the tool is usable, consistent, and sector-appropriate; participant demonstrates ability to use assessment data to identify teaching improvements.
8.4. Final product: assessment system design for a VET sustainability course
Participant produces a complete assessment alignment plan for a 20-hour sustainability-oriented VET course unit — mapping at least three learning outcomes to corresponding teaching activities, assessment tools, evidence types, and feedback methods. This replaces "waste management plan" as the capstone product for this module, as it directly reflects the module's focus on assessment design rather than operational waste management. At the higher level: alignment plan demonstrates full coherence with no gaps; peer and trainer review confirms quality and practical applicability.
8.5. Self- and co-assessment
Participant completes at least one structured self-assessment form during the unit, reflecting on their own assessment design practice, identifying strengths and specific areas for development, and proposing at least one concrete improvement action. At the higher level: self-assessment demonstrates honest and detailed critical reflection; participant actively engages in peer review, providing constructive and criterion-referenced feedback to at least one colleague.

9. Inclusion of the EU/transnational perspective

This unit uses European frameworks — the European Qualifications Framework (EQF), EQAVET, DigComp, and GreenComp — as reference points for assessment design, not as rigid prescriptions. They provide a shared vocabulary for describing learning outcomes, performance levels, and quality criteria increasingly recognised across borders. Participants are actively encouraged to adapt European concepts to the specific institutional, regulatory, and resource realities of VET providers in Albania and Kosovo rather than transplanting approaches that may not fit the local context.
Regarding the comparison between Albania, Kosovo, and EU practices: both countries have adopted national qualification frameworks aligned with the EQF, but the application of competence-based assessment principles in practice remains uneven — particularly in sustainability-related VET courses. EU member states with mature EQAVET implementation (notably Germany, Austria, and the Netherlands) provide useful models for how outcome-oriented assessment can be embedded in dual VET systems. These models are referenced throughout the unit as examples — but always with an acknowledgement that the dual VET tradition, institutional infrastructure, and legal frameworks in Central and Northern Europe differ substantially from the VET context in the Western Balkans. Adaptation, not imitation, is the guiding principle.

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Cross-border learning between Albania and Kosovo is an immediate and practical expression of the transnational dimension. Assessment practices in the two countries share common historical roots and face similar challenges, but have developed in relative isolation. This unit creates structured space for productive comparison and tool exchange. In the longer term, the WARP project aspires to contribute to greater mutual recognition of sustainability-related qualifications between Albania and Kosovo — a process that begins with shared assessment standards and comparable evidence of learner competence. For both countries' EU integration processes, institutions that can demonstrate transparent, evidence-based, and outcome-oriented assessment practices aligned with European standards will be better positioned for international recognition, Erasmus+ partnerships, and the mutual recognition of qualifications that deeper European integration will eventually require.

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8.5 Learning Pathway 4 – Professional Development VET Trainers

Module 14 – Continuous Development Techniques

1. Overview of the Unit

1.1. Unit information

Unit title	Continuous Development Techniques for VET Trainers
This unit is part of…	Module 14
Prerequisites (if any)	

1.2. Justification and objectives of the Teaching Unit

This unit equips VET trainers with practical strategies and tools for continuous professional development in rapidly changing educational and industrial environments. Through reflective practice, collaborative learning, digital upskilling, and engagement with professional networks, trainers will learn how to continuously enhance their teaching effectiveness and maintain alignment with evolving sustainability and labor market requirements.

The unit promotes a lifelong learning mindset and supports trainers in becoming proactive agents of innovation and improvement within their institutions.

1.3. Contextualization of the issue in the country (Albania or Kosovo)

Provide a contextualization of the issue of the unit of the country in question (Albania or Kosovo as the case may be)

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The vocational education sector in Kosovo continues to face rapid changes driven by technological advancement, sustainability requirements, and evolving labor market needs. Many VET professionals require ongoing opportunities to update pedagogical, digital, and industry-specific competencies.

Continuous professional development is increasingly important to ensure that VET trainers can prepare learners for emerging green jobs and sustainable economic development. Strengthening a culture of lifelong learning among educators contributes directly to improving educational quality and workforce readiness.

1.3. Expected results in terms of teaching practices

Explain the main results based on teacher training practices

Participants will:

- Develop individual professional development plans.
- Apply reflective teaching practices.
- Use digital tools for professional growth.
- Participate in professional learning communities.
- Integrate industry feedback into teaching.
- Monitor and evaluate their own professional progress

1.4. Connection with the objectives of the WARP Project

Explain the unit's relationship to the main objectives of the WARP project

This unit supports the WARP project's objective of strengthening the capacity of VET educators to contribute to sustainable development and waste management education. By promoting continuous professional development, trainers remain capable of integrating innovative pedagogical approaches, sustainability principles, digital technologies, and industry developments into their teaching practices.

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2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	Understanding the need for continuous updating of sustainability and environmental knowledge.
Description of the Learning Outcomes related to this competence	Participants can identify emerging environmental challenges and integrate updated sustainability concepts into their teaching.
Description of the evaluation criteria	Development of a professional development plan including sustainability-related learning goals.

2.2. Digital competencies

Description of the competence	Using digital tools for lifelong learning and professional networking.
Description of the Learning Outcomes related to this competence	Describe the Learning Outcomes related to this competence
Description of the evaluation criteria	Participants effectively use online learning platforms, webinars, professional networks, and AI-supported learning tools. Completion of digital learning activities and creation of a personal digital development portfolio.

2.3. Pedagogical competencies

Description of the competence	Applying reflective and evidence-based teaching improvement strategies.
Description of the Learning Outcomes related	Participants analyze their teaching practice and implement improvement actions.

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to this competence	
Description of the evaluation criteria	Reflective journal and professional improvement action plan.

3. Learning outcomes

By the end of this course, students should be able to:

	Knowledge	**Skills**	**Competences**
LO1	Clearly define what learners should know or do by the end of this unit. **Explain principles of continuous professional development**	Define the skills that will be acquired through the development of this unit **Identify personal development needs**	Define the competences that will be acquired through the development of this unit **Demonstrate commitment to life-long learning**
LO2	**Describe reflective teaching methods**	**Apply self-assessment tools**	**Improve teaching through reflection**
LO3	**Explain professional learning communities**	**Collaborate with peers and experts**	**Participate actively in professional networks**
LO4	**Understand digital learning opportunities**	**Use digital CPD tools effectively**	**Maintain continuous professional growth**
LO5	**Understand industry-driven competence development**	**Align learning goals with labor market needs**	**Adapt teaching to emerging industry trends**

4. Teaching contents of the Unit *(the following are proposals for the content of the unit)*

Module 1: Write here the title of your module. **Why Continuous Professional Development Matters**

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Module number 14 & title	Content type	Content development	Notes
14	Paragraph/Heading	Main content of the unit **Why Continuous Professional Development Matters**	
14.1.	Paragraph/Subheading	Main content of this part of the unit 4.1 Why Continuous Professional Development Matters	
14.1.	Paragraph	Explanaition of this main content The modern VET trainer operates in an environment characterized by rapid technological advancement, changing labor market demands, increasing sustainability requirements, and evolving educational methodologies. To remain effective, trainers must continuously update their knowledge, skills, and professional practices. Continuous Professional Development (CPD) is the process through which educators systematically improve their professional competencies throughout their careers. Rather than viewing professional learning as a one-time event, CPD promotes lifelong learning and continuous improvement. Effective CPD enables trainers to: • Remain current with industry developments. • Integrate sustainability and environmental practices into teaching. • Improve learner engagement and outcomes. • Strengthen digital competencies. • Adapt to future workforce requirements. • Foster innovation within educational institutions.	
		4.2 Lifelong Learning as a Professional Mindset Lifelong learning is a core principle of modern education systems and a key	

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component of professional success.
For VET trainers, lifelong learning involves:

- Seeking new knowledge regularly.
- Participating in professional learning opportunities.
- Reflecting on teaching practices.
- Collaborating with peers.
- Engaging with industry developments.

Key Characteristics of Lifelong Learners:

Characteristic	**Description**
Curiosity	Continuously seeking new knowledge and ideas
Adaptability	Responding effectively to change
Reflection	Evaluating personal performance and growth
Collaboration	Learning from others and sharing experiences
Innovation	Exploring new approaches and solutions

4.3 Reflective Practice for Continuous Improvement
Reflective practice refers to the process of critically analyzing one's teaching experiences to identify strengths, challenges, and opportunities for growth.
Reflection helps educators:

- Improve instructional strategies.
- Better understand learner needs.
- Identify areas requiring further development.
- Strengthen decision-making skills.

Common Reflective Questions:

- What worked well during today's lesson?

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		• What challenges emerged? • How engaged were learners? • What would I change next time? • What additional knowledge or skills do I need? Reflective practice can be supported through: • Reflective journals. • Teaching portfolios. • Peer observations. • Learner feedback surveys. • Professional discussions.	
		4.4 Professional Learning Communities (PLCs) Professional Learning Communities are groups of educators who collaborate regularly to improve teaching practices and learner outcomes. Benefits of PLCs include: • Sharing best practices. • Solving common challenges. • Encouraging innovation. • Building professional support networks. • Promoting collective responsibility for learning. Examples of PLC Activities: • Lesson study groups. • Peer coaching sessions. • Professional reading circles. • Joint curriculum development. • Collaborative action research projects.	
		4.5 Digital Tools for Professional Development	

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		Digital technologies have transformed access to professional learning opportunities. Useful digital tools include: Tool Type — Examples Online Courses — Coursera, FutureLearn, edX Professional Networks — LinkedIn, EPALE Collaboration Platforms — Microsoft Teams, Google Workspace Webinar Platforms — Zoom, Microsoft Teams AI Learning Tools — ChatGPT, Copilot, Gemini Digital Portfolios — OneNote, Mahara, Google Sites Digital tools allow educators to: • Learn at their own pace. • Access global expertise. • Participate in international communities. • Document professional growth. • Share resources efficiently.	
		4.6 Industry Engagement and Keeping Knowledge Current VET trainers must maintain strong connections with industry to ensure the relevance of their teaching. Strategies include: • Company visits. • Industry internships or placements. • Participation in conferences. • Collaboration with employers. • Industry advisory boards.	

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		• Guest speaker programs. Benefits: • Better understanding of labor market trends. • Updated technical knowledge. • Enhanced employability outcomes for learners. • Stronger partnerships between education and industry.	
		4.7 Building a Personal Professional Development Plan Professional growth is most effective when guided by clear goals and structured planning. A Professional Development Plan should include: 1. Current Competency Assessment 2. Areas for Improvement 3. Learning Objectives 4. Development Activities 5. Timeline 6. Evidence of Learning 7. Evaluation Measures Example SMART Goal: "Complete a certified online course on digital sustainability education by the end of the academic year and implement at least three new digital teaching strategies in my classroom."	
		4.8 Measuring Professional Growth Continuous development requires regular monitoring and evaluation. Methods include: • Self-assessment checklists. • Peer feedback. • Learner evaluations.	

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		• Observation reports. • Professional portfolios. • Achievement of development goals. Regular evaluation ensures that professional development efforts contribute to improved teaching quality and learner success.	
		4.9 Creating a Culture of Continuous Improvement Educational institutions play an important role in supporting professional growth. A culture of continuous improvement includes: • Leadership support. • Time allocated for learning. • Collaboration opportunities. • Recognition of achievements. • Access to professional development resources. • Encouragement of experimentation and innovation. Institutions that promote continuous improvement create more motivated educators and stronger learning outcomes for students.	

5 Activities (examples)

Module 14: Continuous Development Techniques			
Module number & title	**Activity type**	**Activity development**	**Notes**
Professional Competence	Tab	**Self-Assessment & Reflection** **Objective:**	

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Self-Assessment		Participants evaluate their current professional competencies and identify areas for growth. **Instructions:** Using a self-assessment rubric, participants rate themselves from 1–5 in the following areas: • Sustainability Education • Digital Competence • Industry Engagement • Teaching Methodology • Assessment Practices • Communication Skills • Collaboration and Networking After completing the rubric, participants identify: • Two strongest competencies • Two areas for improvement • One professional development goal for the next six months **Expected Output:** Personal Competence Profile	
Reflective Teaching Journal	Statement	**Individual Reflection** **Objective:** Develop reflective practice as a continuous improvement strategy. **Instructions:** Participants reflect on a recent lesson or training session and answer: 1. What worked particularly well? 2. What challenges emerged? 3. How did learners respond? 4. What would I change next time?	

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		5. What additional skills or knowledge do I need? **Expected Output:** One-page reflective journal entry.	
Professional Learning Community Challenge	Paragraph	**Collaborative Learning** **Objective:** Strengthen peer learning and professional collaboration. **Instructions:** Small groups discuss a common challenge faced by VET trainers. Examples: • Low student engagement • Integrating sustainability topics • Digital tool adoption • Assessment challenges Groups propose practical solutions and present them to peers. **Expected Output:** Collaborative improvement proposal.	
Digital Learning Exploration	Scenario	**Digital Skills Development** **Objective:** Explore online opportunities for continuous professional development. **Instructions:** Participants investigate three professional learning platforms such as: • EPALE • Coursera • FutureLearn	Specify here the right answer.

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		• LinkedIn Learning • Microsoft Learn For each platform they identify: • Available courses • Relevant topics • Potential benefits for their professional growth **Expected Output:** Digital Learning Resource Portfolio.	
Designing a Personal Professional Development Plan	Process	**Project-Based Learning** **Objective:** Create an actionable professional growth strategy. **Instructions:** Participants develop a 12-month Professional Development Plan including: • Professional goals • Required competencies • Planned learning activities • Timeline • Success indicators • Evidence of achievement **Expected Output:** Individual Professional Development Plan.	Specify here the right answers.
Peer Coaching Session	Matching	First choice / First match Second choice / Second match Third choice / Third match	
Matching and fill in the blank	Statement	Peer Learning **Objective:** Use peer feedback as a tool for professional growth. **Instructions:**	Specify here the missing word or words.

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		Participants exchange their development plans and provide constructive feedback based on: • Clarity of goals • Relevance • Feasibility • Alignment with professional needs **Expected Output:** Peer Feedback Form.	
Industry Connection Mapping	Real-World Application	**Objective:** Strengthen connections between VET education and industry. **Instructions:** Participants map potential industry partners and identify opportunities for: • Company visits • Guest speakers • Internships • Collaborative projects • Sustainability initiatives **Expected Output:** Industry Engagement Map.	
My Future Professional Self	Visioning Exercise	**Objective:** Encourage long-term professional growth. **Instructions:** Participants imagine themselves five years in the future and describe: • Skills they have developed • Professional achievements • New teaching approaches implemented • Contributions to sustainability and innovation **Expected Output:** Personal Professional Vision Statement.	

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6. Methodology

5.1. Project-Based Learning (PBL) and collaborative Learning	This unit applies Project-Based Learning by engaging participants in the development of a Personal Professional Development Plan that addresses authentic professional challenges and future growth goals. Collaborative learning is promoted through peer coaching, group discussions, shared reflection, and collective problem-solving activities.
5.2. Collaborative learning between institutions in Albania and Kosovo	Participants are encouraged to exchange experiences, challenges, and good practices across institutions and countries. Cross-border collaboration strengthens regional cooperation, promotes knowledge transfer, and supports the development of common approaches to sustainability and vocational education.
5.3. Blended Learning	The unit combines face-to-face learning, self-directed study, online learning opportunities, and collaborative digital activities. Participants can access learning materials, complete assignments, and engage in discussions through digital platforms while maintaining opportunities for in-person interaction.
5.4. Online and mobile Learning tools	Digital tools are integrated throughout the learning process to support flexibility and accessibility. Examples include: • Learning Management Systems (LMS) • Video conferencing platforms

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	• Digital portfolios • Online professional communities • Artificial Intelligence tools for learning and planning Participants are encouraged to use mobile devices to access learning opportunities anytime and anywhere.
5.5. Real case studies	Participants analyze authentic examples of professional development initiatives implemented by educational institutions and organizations. Case studies allow participants to evaluate successful practices and adapt them to their own contexts.
5.6. Visits to companies in the sector	Where possible, participants engage with industry representatives through company visits, guest lectures, or virtual industry meetings. These experiences help trainers understand evolving workforce requirements and maintain the relevance of their teaching.
5.7. Workshops and experiential learning	Learning activities emphasize active participation and practical application. Workshops include: • Reflection exercises • Goal-setting activities • Peer coaching sessions • Professional development planning • Problem-solving tasks Participants learn through experience, discussion, and application rather than passive information consumption.
5.8. Community based and participatory approaches	The unit promotes active participation and engagement with educational communities, professional networks, and industry stakeholders. Participants are encouraged to contribute to communities of practice and

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	share expertise with colleagues to foster collective professional growth.

7. Resources

Possible resources related to the topic of the unit

The following resources are recommended to support participants throughout the unit:

Professional Development and Lifelong Learning

- European Training Foundation (ETF) resources on VET professional development
- UNESCO resources on lifelong learning and teacher development
- OECD reports on future-ready teaching and learning
- European Commission resources on Continuous Professional Development (CPD)

Digital Learning Platforms

- EPALE (Electronic Platform for Adult Learning in Europe)
- Coursera
- FutureLearn
- edX
- Microsoft Learn
- LinkedIn Learning

Digital Tools

- Microsoft Teams
- Google Workspace
- Zoom
- Padlet
- Miro
- Mentimeter
- OneNote

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- Google Sites

Artificial Intelligence Tools

- ChatGPT
- Microsoft Copilot
- Gemini

These tools can support lesson planning, content creation, reflective practice, and professional learning.

Professional Networking Resources

- Erasmus+ Teacher Academies
- EPALE Communities of Practice
- National and Regional VET Networks
- Industry Associations and Chambers of Commerce

Suggested Reading

- OECD. Teachers as Lifelong Learners
- UNESCO. Reimagining Our Futures Together
- European Framework for the Digital Competence of Educators (DigCompEdu)
- European GreenComp Framework
- European Skills Agenda

Additional Learning Resources

- Webinars and online conferences
- Educational podcasts
- Professional journals
- Industry reports
- Sustainability and circular economy publications

Participants are encouraged to create a personal digital resource library to support ongoing professional development beyond the completion of this unit.

8. Assessment criteria

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Include the assessment criteria for this unit:

Assessment within this unit focuses on authentic professional growth and practical application rather than traditional examinations.

8.1 Use of Digital Tools (20%)

Participants demonstrate their ability to use digital tools to support professional learning and development.

Indicators

- Effective use of digital learning platforms
- Participation in online learning activities
- Creation of a digital portfolio
- Appropriate use of digital collaboration tools

Evidence

- Digital portfolio
- Online course participation records
- Resource collection

8.2 Understanding of Sustainability and Continuous Development Frameworks (15%)

Participants demonstrate understanding of lifelong learning principles, sustainability education, and professional development strategies.

Indicators

- Understanding of CPD concepts
- Awareness of sustainability-related professional competencies
- Ability to connect professional growth with environmental and societal needs

Evidence

- Reflection activities
- Discussions
- Professional development planning

8.3 Ability to Implement Real Improvements (25%)

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Participants identify realistic actions that can improve their professional practice.

Indicators

- Identification of development needs
- Practical improvement strategies
- Application of reflective practice
- Integration of new learning into professional contexts

Evidence

- Reflection journal
- Improvement action plan
- Peer feedback

8.4 Final Product: Professional Development Plan (30%)

Participants develop a comprehensive 12-month Professional Development Plan.

Indicators

- Clear professional goals
- SMART objectives
- Realistic timeline
- Relevant learning activities
- Success indicators and evaluation measures

Evidence

- Completed Professional Development Plan

8.5 Self-Assessment and Peer Assessment (10%)

Participants actively engage in evaluating their own progress and providing constructive feedback to peers.

Indicators

- Honest self-reflection
- Constructive peer feedback
- Engagement in coaching discussions
- Commitment to continuous improvement

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Evidence

- Self-assessment rubric
- Peer feedback forms

Assessment Summary

Assessment Component	Weight
Use of Digital Tools	20%
Understanding of Sustainability & CPD Frameworks	15%
Ability to Implement Real Improvements	25%
Professional Development Plan	30%
Self- & Peer Assessment	10%
Total	**100%**

9. Inclusion of the EU/transnational perspective

Please, comment the comparison between practices in Albania, Kosovo and the EU, adaptation of European standards to the local context…

Continuous professional development is a strategic priority across the European Union and is recognized as a key factor in improving the quality, relevance, and sustainability of vocational education and training.
European frameworks such as DigCompEdu, GreenComp, the European Skills Agenda, and the Council Recommendation on Vocational Education and Training emphasize the importance of lifelong learning, digital competence, sustainability awareness, and professional adaptability among educators.
In Finland and many other EU countries, teachers are viewed as autonomous professionals and lifelong learners who continuously

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engage in professional development throughout their careers. Continuous learning is embedded within institutional culture and supported through collaboration, research-informed practice, and professional trust.
In Kosovo and Albania, important progress has been made in strengthening VET systems and aligning them with European standards. However, opportunities remain to further develop structured professional development pathways, increase access to international learning opportunities, and strengthen collaboration between educational institutions and industry.
This unit contributes to these objectives by promoting:

- Lifelong learning as a professional responsibility.
- Continuous improvement through reflective practice.
- Digital transformation in education.
- Sustainability-oriented professional development.
- Cross-border collaboration between Albania, Kosovo, and European partners.
- Alignment with European competence frameworks.

Through the WARP Project, participants will have opportunities to exchange experiences, compare practices, and learn from different educational systems across Europe. This transnational approach encourages innovation, strengthens regional cooperation, and supports the development of future-ready VET professionals capable of responding to emerging environmental, technological, and economic challenges.
The unit therefore supports both local educational priorities and broader European objectives for sustainable, inclusive, and high-quality vocational education and training.

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Module 15 – Interpreting Industry and Market Trends

1. Overview of the Unit

1.1. Unit information

Unit title	**Interpreting Industry and Market Trends**
This unit is part of…	**Part of Pathway 4: Professional Development VET Trainers**
Prerequisites (if any)	Interpreting industry and market trends is a critical competence for VET trainers engaged in the dual transition toward green and digital economies. In Kosovo, Albania, and across the EU framework, trainers must continuously monitor labor market developments, technological advancements, and evolving sustainability standards, particularly in waste management and recycling sectors. • This involves analyzing data from industry reports, policy frameworks, and employer needs to align training content with real-world demands. • Trainers should also understand circular economy principles, digitalization of waste systems, and emerging green skills requirements. By integrating these insights into curricula, VET trainers enhance the relevance and employability of learners. Furthermore, collaboration with industry stakeholders, participation in professional networks, and engagement in EU initiatives strengthen trainers' capacity to anticipate changes and adapt teaching methodologies. Ultimately, effective interpretation of market trends ensures that vocational education remains responsive, innovative, and aligned with sustainable development goals. ***Prerequisites for interpreting industry and market trends*** within the WARP module require a foundational blend of knowledge, skills, and professional awareness among VET trainers. • Firstly, trainers should ***possess basic understanding of vocational education systems in Kosovo, Albania, and the EU***, including policy frameworks related to lifelong learning and skills development.

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	• ***Familiarity with key concepts such as circular economy, sustainability, and digital transformation is essential,*** particularly in the context of waste management and recycling sectors. • Trainers should also ***have introductory knowledge of labor market analysis***, including how to read and interpret reports, statistics, and sectoral studies. • ***Digital literacy is a critical prerequisite***, enabling trainers to access online databases, industry platforms, and analytical tools. Additionally, ***communication and critical thinking skills*** are necessary to translate complex market information into practical learning outcomes. ***Prior experience in teaching, training delivery, or collaboration with industry stakeholders*** is highly beneficial for effectively engaging with this module.

1.2. Justification and objectives of the Teaching Unit

This teaching unit is designed to strengthen the capacity of VET trainers to effectively interpret industry and market trends within the context of the green and digital (dual) transition. Rapid changes in waste management, recycling technologies, and circular economy practices require trainers to continuously update their knowledge and align training provision with labor market needs in Kosovo, Albania, and the EU. The unit addresses the gap between vocational education and evolving industry demands by equipping trainers with analytical tools and practical approaches for integrating market intelligence into teaching.

The main objectives are to:
(1) develop trainers' ability to analyze industry reports and labor market data;
(2) enhance understanding of emerging skills in waste and recycling sectors;
(3) support the integration of trend-based insights into curricula and training delivery; and
(4) foster collaboration with industry stakeholders.

Unit Description and Duration
This unit introduces key concepts, tools, and practices for interpreting market trends and applying them in VET contexts. It includes case studies, data analysis exercises, and practical applications. Suggested duration: 6–8 hours.

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1.3. Contextualization of the issue in the country (Albania or Kosovo)

In Kosovo, the ability to interpret industry and market trends remains a developing competence within the VET system, particularly in sectors linked to waste management and recycling. The country is undergoing gradual alignment with European Union standards, especially in environmental protection and circular economy practices. However, limited availability of structured labor market intelligence, weak industry–education linkages, and rapidly evolving green technologies create challenges for VET trainers.

Kosovo's waste management sector is characterized by increasing demand for sustainable solutions, driven by urbanization, regulatory reforms, and donor-supported environmental initiatives. Despite this, VET curricula often lag behind market needs, and trainers may lack access to updated data and analytical tools. This gap reduces the responsiveness of vocational education to emerging occupations and green skills requirements.

Therefore, strengthening trainers' capacity to interpret market trends is essential. It enables them to align training with industry developments, support employability, and contribute to Kosovo's transition toward a more sustainable and competitive economy in line with EU integration processes.

1.3. Expected results in terms of teaching practices

The teaching unit on interpreting industry and market trends is expected to produce measurable improvements in VET trainers' pedagogical approaches and professional practices.

- Firstly, ***trainers will adopt more evidence-based teaching*** by integrating labor market data, sector reports, and industry forecasts into lesson planning and delivery. This will result in training content that is more relevant, up-to-date, and aligned with the needs of the waste management and recycling sectors.
- Secondly, ***trainers will enhance their capacity to design competency-based curricula that reflect emerging green and digital skills***. They will be able to translate complex market information into practical learning outcomes, case studies, and problem-based learning activities. Thirdly, teaching practices will become more interactive and learner-centered, incorporating real-life scenarios, project-based assignments, and collaboration with industry partners.

Additionally, ***trainers will strengthen partnerships with employers and stakeholders***, enabling work-based learning opportunities and continuous feedback loops. Overall, the unit will foster adaptive, innovative, and market-responsive teaching practices that improve learner employability and support the dual transition agenda.

1.4. Connection with the objectives of the WARP Project

The unit "Interpreting Industry and Market Trends" is closely aligned with the core objectives of the Erasmus+ WARP Project – "Waste

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and Recycling Practices for Dual Transition in Vocational Education." The WARP project aims to modernize VET systems by integrating green (environmental sustainability) and digital (technological innovation) dimensions into vocational training. This unit directly contributes to these goals by equipping VET trainers with the skills to analyze evolving industry needs in the waste management and recycling sectors. By ***strengthening trainers' ability to interpret labor market intelligence***, the unit supports the development of relevant, future-oriented curricula that reflect circular economy principles and digital transformation trends. It ***enhances the responsiveness of VET provision to industry demands***, thereby improving learners' employability and supporting workforce readiness for green jobs. Furthermore, the unit ***promotes stronger collaboration between education providers and industry stakeholders***, a key priority of WARP. It also contributes to capacity building among trainers in Kosovo, Albania, and the broader European Union context, ensuring alignment with EU priorities for sustainable growth, innovation, and skills development.

2. Key competences to be developed

2.1. Ecological competencies

Description of the competence	This unit develops key ecological competencies that enable VET trainers to integrate sustainability principles into vocational education, particularly within the waste management and recycling sectors. A central competence is the understanding and ***application of circular economy principles, emphasizing waste reduction, reuse, recycling, and resource efficiency***. Trainers will gain the ability to interpret how industry trends are influenced by environmental regulations, green innovation, and sustainable production systems, especially within the European Union policy framework. Another important competence is ***environmental awareness and responsibility***. Trainers will be equipped to promote sustainable behaviors and practices among learners, encouraging critical reflection on environmental impacts of industrial activities. This includes knowledge of waste hierarchy, lifecycle thinking, and eco-design approaches relevant to modern industries.

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	The unit also strengthens systems thinking, enabling trainers to understand the ***interconnections between economic activities, environmental impacts, and social outcomes***. This competence is essential for interpreting market trends in a holistic way, considering not only economic demand but also sustainability requirements and climate goals. Furthermore, trainers will develop the ability to ***embed green skills into curricula, aligning training with labor market needs for environmentally responsible jobs***. This includes identifying emerging occupations in recycling, waste treatment, and resource management sectors. Overall, these ecological competencies support the dual transition by ensuring that VET trainers contribute to environmentally sustainable education and prepare learners for green economy challenges in countries like Kosovo and Albania.
Description of the Learning Outcomes related to this competence	Upon completion of this unit, VET trainers will be able to demonstrate a comprehensive set of learning outcomes related to ecological competencies, aligned with the objectives of sustainable development and the dual green and digital transition. • Trainers will ***be able to critically interpret industry and market trends through the lens of environmental sustainability, recognizing the growing importance of the circular economy in shaping modern vocational sectors,*** particularly waste management and recycling. • They will be able to identify and ***explain key environmental concepts such as resource efficiency, waste hierarchy, lifecycle thinking, and eco-innovation, and apply these concepts in the design and delivery of VET curricula***. Trainers will also be able to integrate sustainability-oriented content into teaching practices, ensuring that learners acquire relevant green skills demanded by the labor market. • Furthermore, trainers will ***develop the ability to analyze how environmental policies and regulations, especially those promoted by the European Union, influence industry practices and occupational standards.*** They will be able to

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	translate this knowledge into practical learning activities, case studies, and problem-solving exercises. Another key learning outcome is the ***promotion of environmental responsibility and awareness among learners.*** Trainers will be able to ***encourage critical thinking and behavioral change toward sustainable practice***s in professional contexts. Finally, trainers will be capable of fostering interdisciplinary and systems-based thinking, understanding the connections between environmental, economic, and social dimensions. This will enable them to better prepare learners for emerging green jobs and contribute to sustainable development in contexts such as Kosovo and Albania.
Description of the evaluation criteria	The evaluation of ecological competencies in this unit is designed to verify that VET trainers have effectively acquired the intended learning outcomes and can apply them in professional teaching contexts. Assessment will be based on a combination of knowledge demonstration, practical application, and reflective practice. Firstly, trainers' ***understanding of key sustainability concepts***, including the circular economy, will be verified through written assessments, quizzes, or short analytical reports. These tasks will evaluate their ability to explain ecological principles such as waste hierarchy, resource efficiency, and lifecycle thinking, and relate them to industry and market trends. Secondly, ***practical application will be assessed through the development of lesson plans, training modules, or case studies that integrate ecological concepts***. Trainers will be required to demonstrate how they incorporate environmental sustainability into VET curricula, aligning with sector needs and policy frameworks such as those promoted by the European Union. Thirdly, ***observation of teaching practices—either through simulated sessions, peer review, or real classroom delivery—will be used to verify pedagogical competence***. This includes the use of interactive, learner-centered methods that promote environmental awareness and critical thinking. Additionally, ***reflective assignments or portfolios will be used to assess trainers' abil-***

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	ity to critically evaluate their own teaching practices and identify areas for improvement in integrating ecological competencies. Finally, ***feedback from peers, mentors, or industry stakeholders*** may be incorporated to ensure that training practices are relevant and aligned with labor market expectations. These combined evaluation methods ensure that learning outcomes are not only understood but effectively applied in contexts such as Kosovo and Albania.

2.2. Digital competencies

Description of the competence	Digital competencies within this unit refer to the ability of VET trainers to effectively use digital tools, data, and technologies to interpret industry and market trends, particularly in the context of waste management, recycling, and the dual green and digital transition. These competencies enable trainers to modernize teaching practices and align vocational education with evolving labor market demands. • A core aspect of this competence ***is digital literacy, including the ability to access, evaluate, and use online platforms, databases, and industry reports*** to gather relevant labor market information. Trainers are expected to be able to interpret digital data sources such as statistical dashboards, sectoral analysis tools, and sustainability reporting systems. • Another important dimension is ***data interpretation and digital analysis***. Trainers should be capable of transforming raw data into meaningful insights that inform curriculum development and teaching strategies. This includes identifying emerging job roles, skills gaps, and technological trends in sectors such as recycling and circular economy industries. • ***Digital communication and collaboration skills are also essential***. Trainers must be able to use digital platforms for professional networking, collaboration with industry stakeholders, and participation in EU-funded initiatives and projects. This strengthens their ability to remain updated and responsive to market changes.

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	• In addition, the competence ***includes the ability to integrate digital tools into teaching practice,*** such as learning management systems, interactive applications, and simulation tools that enhance learner engagement and understanding of real-world industry processes. Overall, digital competencies empower VET trainers in countries such as Kosovo and Albania to deliver innovative, data-informed, and future-oriented vocational education aligned with the priorities of the European Union and the demands of the modern labor market.
Description of the Learning Outcomes related to this competence	Upon completion of this unit, VET trainers will achieve a set of learning outcomes related to digital competencies that enable them to effectively interpret industry and market trends in a technology-driven vocational education context. Trainers will be able to identify, access, and critically use digital sources of information, including labor market databases, sectoral reports, and online analytical platforms, to support evidence-based teaching and curriculum development. **Learning Outcomes**: • A key learning outcome is ***the ability to analyze and interpret digital data related to employment trends, emerging occupations, and skill demands in sectors such as waste management and recycling.*** Trainers will be capable of transforming complex digital information into practical insights that inform training content and improve learner employability. • Another important outcome is the ***ability to use digital tools and platforms for professional collaboration and communication.*** Trainers will demonstrate competence in engaging with industry stakeholders, participating in online professional networks, and contributing to EU-funded initiatives and knowledge-sharing platforms, including those aligned with the European Union frameworks. • Trainers will also be able ***to integrate digital technologies into teaching practice***. This includes the use of learning management systems, interactive digital resources, and simulation tools that enhance learner engagement and support the understanding of real-world industry processes.

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	• Furthermore, trainers will develop ***the ability to critically evaluate digital content***, ensuring the reliability and relevance of information used in vocational training contexts. This supports informed decision-making in curriculum design and delivery. Overall, these learning outcomes ensure that VET trainers in contexts such as Kosovo and Albania are equipped to deliver innovative, data-driven, and future-oriented education aligned with the digital transformation of the labor market.
Description of the evaluation criteria	The verification of learning outcomes for digital competencies within the module "Professional Development VET Trainers" in the Erasmus+ WARP project is designed to ensure that trainers in Kosovo, Albania, and EU partner institutions demonstrate both practical and pedagogical mastery of digital tools relevant to interpreting industry and market trends in waste and recycling practices.The evaluation is based on a combination of formative and summative assessment methods aligned with competency-based learning principles. • First, **continuous formative assessment** will be conducted through observation of participants' engagement in digital learning activities, including the use of data visualization tools, online collaborative platforms, and industry trend analysis software. Trainers will be required to participate in guided workshops where their ability to collect, interpret, and present digital data related to circular economy and recycling markets is assessed in real time. • Second, **practical assignments and project-based tasks** will serve as the core verification instruments. Participants must complete a digital portfolio demonstrating their ability to analyze market trends using relevant digital tools (e.g., Excel dashboards, Power BI, or equivalent open-source platforms). The portfolio will include interpretation of industry data, graphical representation of trends, and application of findings to vocational training scenarios. • Third, **peer and self-assessment mechanisms** will be integrated to evaluate collaborative digital work and reflective practice. Participants will assess each

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	other's outputs using standardized rubrics focusing on accuracy of data interpretation, digital tool proficiency, and relevance to vocational education contexts. • Finally, a **summative assessment interview or presentation** will be conducted, where participants defend their digital analysis of a selected industry trend. External evaluators and project experts will apply standardized criteria to ensure objectivity, focusing on digital literacy, analytical thinking, and pedagogical application. Learning outcomes will be considered achieved when participants demonstrate consistent ability to use digital tools effectively, interpret market and industry trends accurately, and apply insights to vocational education practices in a structured and transferable manner.

2.3. Pedagogical competencies

Description of the competence	The pedagogical competencies within the Unit "Professional Development VET Trainers" under the Erasmus+ WARP Project ("Waste and Recycling Practices for Dual Transition in Vocational Education") are designed to strengthen the capacity of VET trainers in Kosovo, Albania, and EU partner institutions to deliver high-quality, learner-centred, and industry-relevant education aligned with green and digital transitions. This unit focuses on a set of interconnected pedagogical competences that enable trainers to effectively design, implement, and evaluate vocational learning processes. First, **competence in learner-centred teaching methodologies** is emphasized. Trainers are expected to apply active learning strategies such as problem-based learning, project-based learning, and collaborative learning, ensuring that students engage critically with real-world challenges in waste management and recycling industries. Second, the unit develops **competence in curriculum design and instructional planning**, enabling trainers to align learning outcomes with labour market needs and EU

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	green transition priorities. This includes the ability to structure learning modules, integrate interdisciplinary content, and adapt teaching materials to diverse learner profiles. Third, **assessment and feedback competence** is a core component. Trainers are trained to design valid and transparent assessment tools, including formative and summative approaches, competency-based evaluation, and reflective feedback mechanisms that support continuous learner improvement. Fourth, the unit includes **digital and blended learning pedagogy competence**, focusing on the effective integration of digital tools, online platforms, and virtual learning environments to enhance vocational education delivery. Finally, **reflective and inclusive teaching competence** is emphasized, encouraging trainers to critically evaluate their own teaching practices, promote equity and inclusion, and adapt to multicultural classroom environments across Kosovo, Albania, and EU contexts. Overall, these pedagogical competencies ensure that VET trainers become facilitators of innovation, sustainability, and employability-oriented learning, capable of supporting the dual digital and green transition in vocational education systems.
Description of the Learning Outcomes related to this competence	The learning outcomes of the pedagogical competencies' unit within the Erasmus+ WARP Project ("Waste and Recycling Practices for Dual Transition in Vocational Education") are designed to ensure that VET trainers in Kosovo, Albania, and EU partner institutions acquire advanced teaching capabilities aligned with the demands of green and digital transformation in vocational education. • Upon completion of this unit, participants will be able to **design learner-centred vocational learning processes** that actively engage students in problem-solving, critical thinking, and applied learning. They will demonstrate the ability to apply methodologies such as project-based learning, case-based learning, and collaborative group work tailored to the waste management and recycling sectors. • Participants will also be able to **develop structured and competence-based**

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	lesson plans and curricula aligned with labour market needs and EU sustainability priorities. This includes defining clear learning objectives, selecting appropriate teaching strategies, and integrating interdisciplinary content related to circular economy principles and industry innovation. • A further learning outcome is the ability to **apply effective assessment and feedback strategies**. Trainers will be able to design valid assessment tools that measure both theoretical knowledge and practical skills, while providing constructive, timely, and formative feedback that supports learner progression and competence development. • In addition, participants will demonstrate **proficiency in digital and blended learning environments**, including the use of Learning Management Systems (LMS), online collaboration tools, and digital content creation platforms to enhance teaching delivery and learner engagement. • Finally, learners will develop the capacity to **reflect critically on their own pedagogical practice and promote inclusive learning environments**, ensuring that teaching approaches address diverse learner needs, encourage participation, and foster equity in vocational education settings. Overall, these learning outcomes ensure that VET trainers become effective facilitators of innovative, inclusive, and industry-relevant education, capable of responding to the dual digital and green transition challenges in the vocational education and training systems of the Western Balkans and the EU.
Description of the evaluation criteria	The evaluation criteria for pedagogical competencies within the Erasmus+ WARP Project ("Waste and Recycling Practices for Dual Transition in Vocational Education") are designed to systematically verify whether VET trainers in Kosovo, Albania, and EU partner institutions have successfully achieved the expected learning outcomes. The assessment approach is competency-based, combining theoretical understanding with practical teaching performance. • The verification process is structured through multiple complementary assess-

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	ment methods. First, **teaching practice observation and performance assessment** will be conducted during simulated or real training sessions. Trainers will be evaluated on their ability to apply learner-centred methodologies, manage classroom interaction, facilitate active learning, and integrate vocational content relevant to waste and recycling practices. Standardized observation rubrics will be used to ensure transparency and consistency. • Second, participants will complete a **lesson planning and curriculum design portfolio**, which will serve as a key evidence-based tool. This portfolio will be assessed based on clarity of learning outcomes, alignment with labour market needs, integration of green and digital competencies, and methodological appropriateness. The quality of instructional design will be a core indicator of pedagogical competence acquisition. • Third, **assessment design tasks** will be used to verify the ability of trainers to develop valid and reliable evaluation instruments. Participants must demonstrate the use of both formative and summative assessment methods, including feedback strategies that support learner progression. • Fourth, **reflective practice reports and self-evaluation tools** will be implemented to assess critical thinking and continuous professional development. Trainers will be required to analyze their teaching practice, identify strengths and areas for improvement, and propose pedagogical enhancements. • Finally, **peer review and external expert evaluation** will complement the process, ensuring objectivity and alignment with EU quality standards in vocational education. Learning outcomes will be considered fully achieved when participants consistently demonstrate effective teaching practice, evidence-based instructional design, appropriate assessment strategies, and reflective, inclusive pedagogical approaches applicable in VET systems across the Western Balkans and the EU.

3. Learning outcomes

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By the end of this course, students should be able to:

	Knowledge	Skills	Competences
LO1: Analyze industry and market trends in the context of waste management and recycling practices, using relevant data sources, reports, and digital tools to identify patterns, opportunities, and challenges in the VET sector.	By the end of this unit, students should be able to demonstrate a solid understanding of key concepts related to industry and market trend analysis within the waste management and recycling sector. This includes knowledge of the principles of the: • circular economy, • sustainable resource management, and • the role of recycling in supporting the green and digital transition. Learners will be familiar with major drivers of market change, such as regulatory frameworks, technological innovation, environmental policies, and consumer behavior patterns across Kosovo, Albania, and the European Union context. Students should also understand the types and sources of data used in trend analysis, including ***industry reports, labor market information sys-***	By the end of this unit, students will acquire a set of practical and analytical skills necessary to interpret industry and market trends in the waste management and recycling sector. Learners will be able ***to collect, organize, and critically analyze data from diverse sources such as industry reports, statistical databases, policy documents, and digital platforms***. They will develop the ability to use basic digital tools (e.g., spreadsheets, data visualization software, and online dashboards) to identify patterns, correlations, and emerging trends. Students will also gain skills in interpreting key indicators, such as ***waste generation rates, recycling performance, and labor market demands, and translating this data into meaningful insights for the VET context.*** They will be able to compare trends across different regions (Kosovo, Albania, and the EU) and assess their implications for skills development	By the end of this unit, students will develop key competences that integrate knowledge and skills into effective professional performance within the VET and waste management sectors. Learners will be able to: • Independently interpret and critically assess industry and market trends, • demonstrating autonomy in selecting appropriate data sources, • analytical approaches, and • digital tools. They will show responsibility in applying evidence-based thinking to real-life challenges, particularly those related to sustainability, circular economy practices, and the green and digital transition. Students will also develop the competence to adapt VET training content and approaches in response to changing labor market needs. This includes the ***ability to collaborate with stakeholders such as industry partners,***

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	tems, statistical databases, and digital monitoring tools. They will be able to identify key indicators (e.g., recycling rates, waste generation trends, employment shifts in green jobs) and explain their relevance to vocational education and training (VET). Furthermore, learners will acquire knowledge of how these trends influence skills demand, occupational profiles, and curriculum development in VET systems. This foundational knowledge will enable students to interpret and contextualize market developments and support evidence-based decision-making in professional practice.	and training needs. Furthermore, learners will strengthen their: • Problem-solving and decision-making skills by applying trend analysis to real-world scenarios. • They will be capable of formulating evidence-based recommendations for adapting VET curricula, aligning training programs with industry needs, and supporting sustainable practices. • Communication skills will also be enhanced, enabling students to clearly present findings through reports, presentations, and data-driven arguments.	***policymakers, and educational institutions to ensure relevance and innovation in vocational education***. They will demonstrate initiative and creativity in proposing solutions that align with environmental standards and economic demands. Furthermore, learners will ***strengthen their communication and teamwork competences by effectively presenting analyses, justifying decisions, and engaging in multidisciplinary contexts***. Ethical awareness and professional integrity will be emphasized, ensuring that decisions related to waste management and recycling practices contribute to sustainable development goals and societal well-being.
LO2: Evaluate the impact of emerging economic, environmental, and technological trends	By the end of this unit, students should be able to: • Demonstrate comprehensive knowledge of how emerging economic, environmental, and technological trends influence vocational education and training (VET) systems.	By the end of this unit, students will: • Develop analytical and practical skills to evaluate the impact of emerging trends on VET systems. • They will be able to critically assess economic, environmental,	By the end of this unit, students will acquire key competences that enable them to apply knowledge and skills in real-world VET and professional contexts. • They will demonstrate the ability to independently evaluate

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on vocational education and training (VET), particularly in relation to the dual transition (green and digital) in Kosovo, Albania, and the EU.	• Learners will understand key concepts related to the dual transition, including the green transition (sustainability, circular economy, climate policies) and the digital transition (digitalization, automation, and Industry 4.0). • They will be familiar with major drivers of change such as EU policies, environmental regulations, technological innovation, and shifting labor market demands in Kosovo, Albania, and the European Union. Students will also ***acquire knowledge of how these trends affect occupational profiles, skills requirements, and workforce development in sectors related to waste management and recycling.*** They will understand the relationship between industry evolution and VET curriculum adaptation, including the need for new competencies such as digital literacy, environmental awareness, and interdisciplinary skills. Furthermore, learners will be able to	and technological developments and interpret their implications for skills demand, employment patterns, and training needs. • Learners will gain the ability to collect and analyze data from various sources, including policy reports, labor market statistics, and digital tools, to support evidence-based evaluation. Students will also develop ***skills in comparative analysis, enabling them to assess differences and similarities between Kosovo, Albania, and EU VET systems in responding to the dual transition.*** They will be capable of identifying gaps between current training provision and future labor market needs, particularly in green and digital sectors. Additionally, learners will strengthen their problem-solving abilities by proposing practical solutions to improve VET responsiveness and alignment with industry trends. Communication skills will be enhanced through the preparation of	the impact of economic, environmental, and technological trends on education and training systems, showing critical thinking, autonomy, and responsibility in decision-making processes. Learners will develop the competence to contribute to the modernization and innovation of VET systems by ***aligning training programs with the requirements of the green and digital transition.*** This includes the ability to collaborate effectively with stakeholders such as policymakers, educators, industry representatives, and training providers to ensure that VET remains relevant and future-oriented. Students will also demonstrate adaptability and initiative in responding to rapidly changing labor market conditions. Furthermore, they will strengthen their ethical and professional competences by promoting sustainable development, social inclusion, and responsible innovation within VET. They will be able to integrate environmental and digital considerations into

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	identify key policy frameworks, strategic documents, and labor market intelligence sources that inform VET reforms and modernization processes. This knowledge will provide a solid foundation for evaluating the relevance and responsiveness of VET systems in the context of ongoing socio-economic and technological transformations.	analytical reports, presentations, and policy briefs. Students will be able to clearly articulate findings, justify recommendations, and engage in professional discussions with stakeholders. These skills will support their ability to translate complex trend data into actionable insights for VET development.	strategic planning and curriculum design, contributing to long-term societal and economic resilience. These competences will prepare learners to act as proactive contributors to the transformation of VET systems in Kosovo, Albania, and the broader EU context.
LO3: **Apply trend analysis to inform decision-making and curriculum development in VET**, enabling alignment with labor market needs, sustainability goals, and evolving industry standards in waste and recycling practices.	By the end of this unit, students should be able to demonstrate in-depth knowledge of how trend analysis informs decision-making and curriculum development within vocational education and training (VET). • Learners will understand key concepts such as labor market intelligence, skills forecasting, curriculum alignment, and competence-based education, particularly in the context of waste management and recycling practices. • They will be familiar with the principles of the circular economy, sustainability standards, and industry-specific regulations that shape occupational	By the end of this unit, students will develop practical and analytical skills to apply trend analysis in decision-making and curriculum development processes. They will be ***able to collect, interpret, and synthesize labor market data, industry reports, and policy documents to identify current and emerging skills needs in the waste management and recycling sector***. Learners will gain the ability to translate these insights into actionable recommendations for curriculum design and improvement. Students will also ***develop skills in designing competence-based learning outcomes, structuring training modules, and aligning educational con-***	By the end of this unit, students will acquire key competences that enable them to effectively integrate trend analysis into professional practice within VET systems. They will demonstrate the ability to independently make informed decisions regarding curriculum development, showing autonomy, responsibility, and critical thinking. Learners will be capable of aligning training programs with labor market needs, sustainability priorities, and evolving industry standards in waste management and recycling. Students will also develop the competence to act as change agents within VET institutions, contributing to innovation, modernization, and continu-

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	requirements. Students will also acquire knowledge of methodologies used in trend analysis, including data interpretation, scenario analysis, and benchmarking against EU standards. • They will understand how to translate industry and market trends into curriculum components such as learning outcomes, training modules, and assessment criteria. • Furthermore, learners will be able to identify the relationships between evolving industry standards, technological innovation, and the need for continuous updating of VET programs. • They will gain awareness of policy frameworks and strategic priorities at national and EU levels that guide curriculum reform and ensure responsiveness to labor market needs. This knowledge will provide a foundation for designing relevant, future-oriented VET curricula that support sustainability and employability.	***tent with industry standards and sustainability goals.*** • They will be able to use digital tools and data visualization techniques to support analysis and present findings clearly. • Additionally, learners will strengthen their strategic thinking and problem-solving skills by evaluating different scenarios and selecting appropriate approaches to curriculum adaptation. Communication and collaboration skills will be enhanced through group work, stakeholder engagement, and the presentation of proposals for curriculum innovation. Students will ***be capable of justifying their decisions using evidence-based arguments and adapting their recommendations to different VET contexts, including Kosovo, Albania, and the EU.*** These skills will enable them to actively contribute to improving the relevance and quality of VET systems.	ous improvement of educational programs. They will be able to collaborate with a wide range of stakeholders, including employers, policymakers, educators, and community actors, to ensure that curricula remain relevant and responsive to socio-economic and environmental challenges. Furthermore, learners will demonstrate adaptability and forward-thinking by anticipating future trends and proactively integrating them into curriculum planning. They will uphold ethical and professional standards by promoting sustainable development, resource efficiency, and responsible decision-making. These competences will empower students to support the dual transition (green and digital) and enhance the overall effectiveness and resilience of VET systems in Kosovo, Albania, and the European context.

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4. Teaching contents of the Unit *(the following are proposals for the content of the unit)*

Module 1: Professional Development VET Trainers: Interpreting Industry and Market Trends			
Module number & title	**Content type**	**Content development**	**Notes**
1.1 Module: **Fundamentals of Industry and Market Trend Analysis in VET**	Paragraph/Heading	This module introduces VET trainers to the essential concepts, tools, and frameworks used to understand and interpret industry and market trends, with a particular focus on the waste management and recycling sector and the dual (green and digital) transition. The unit begins with an **introduction to key concepts**, including the definition of industry trends, market dynamics, labor market intelligence (LMI), and the role of trend analysis in Vocational Education and Training (VET). It explains why trend analysis is critical for aligning VET programs with evolving economic, technological, and environmental demands at national and EU levels. The second part focuses on **types of trends**, such as economic, technological, environmental, and social trends. Special attention is given to trends shaping the circular economy, sustainability practices, and green jobs in waste and recycling sectors in Kosovo, Albania, and the EU. Learners explore how digitalization (AI, automation, data systems) is transforming industries and skill requirements. The module then introduces **sources of industry and market data**, including national statistics agencies, EU databases (e.g., Eurostat), sector reports, employer surveys, and real-time labor market platforms. Trainers learn how to access, interpret, and critically evaluate these data sources. A core component is **methods and tools for trend analysis**, including basic quali-	

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		tative and quantitative techniques such as SWOT analysis, PESTLE analysis, and simple forecasting approaches. Participants are guided on how to translate raw data into meaningful insights for curriculum development. The module also addresses **skills anticipation and forecasting**, helping trainers understand how to identify emerging occupations, future skills needs, and gaps between education and labor market demands. This includes linking findings to qualification frameworks and competency-based education. Finally, the unit integrates **practical application**, where trainers analyze case examples from the waste and recycling sector and develop mini trend analysis reports. Emphasis is placed on using findings to update VET curricula, design relevant training programs, and support learners' employability in a rapidly changing labor market.	
1.2 Module: **Data Sources and Tools for Labor Market Intelligence**	Paragraph/Sub-heading	This unit equips VET trainers with the knowledge and practical skills to identify, access, and use **Labor Market Intelligence (LMI)** effectively. It begins with an overview of key **data sources**, including national statistical offices, public employment services, sectoral observatories, and international databases such as Eurostat, Cedefop, and OECD. The module explores **quantitative and qualitative data collection methods**, including labor force surveys, employer questionnaires, administrative data, and industry reports, with a focus on relevance for the waste and recycling sector. Participants learn how to assess data reliability, validity, and timeliness. A core component focuses on **digital tools and platforms** used for LMI analysis, such as online job portals, skills intelligence platforms, and data visualization tools. Trainers are introduced to techniques for extracting insights from real-time labor market data and identifying emerging occupations and skills trends. The unit also covers **data interpretation and application**, guiding participants on how to translate raw data into actionable insights for curriculum development, skills forecasting, and policy alignment. Practical exercises include analyzing datasets,	

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		mapping skills demand, and linking findings to VET standards and qualifications frameworks. By the end of the module, trainers will be able to use LMI tools strategically to ensure that VET provision is responsive to labor market needs, supports the green and digital transition, and enhances learner employability.	
1.3 Module: **Analyzing Waste Management and Recycling Industry Trends**		This module provides VET trainers with in-depth knowledge and analytical tools to understand trends shaping the waste management and recycling sector within Kosovo, Albania, and the EU. It begins with an overview of the **waste management value chain**, including collection, sorting, recycling, recovery, and disposal, and its role in the **circular economy**. The unit explores key **industry trends**, such as increasing recycling targets, resource efficiency, green innovation, and regulatory developments driven by EU policies and frameworks. Participants examine how strategies promoted by the European Commission and data from Eurostat influence national systems and labor market needs. A central component focuses on **technological and digital trends**, including automation in sorting systems, smart waste management, and data-driven decision-making. Trainers analyze how these changes affect occupational profiles, skill requirements, and emerging green jobs. The module also addresses **regional challenges and opportunities**, comparing practices in Kosovo, Albania, and EU countries, highlighting gaps in infrastructure, policy implementation, and workforce skills. Practical activities include analyzing sector reports, identifying key performance indicators (KPIs), and conducting mini trend analyses. Trainers learn to translate findings into **curriculum updates**, ensuring VET programs align with industry demands, sustainability goals, and the dual green and digital transition.	
1.4 Module: **Green Skills and Circular Economy in**		This module introduces VET trainers to the concepts of **green skills** and the **circular economy**, emphasizing their growing importance in modern labor markets and vocational education systems. It begins by defining green skills, sustainability competencies, and circular economy principles such as reduce, reuse, recycle, and resource	

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Vocational Education		efficiency. The unit explores EU policy frameworks and strategies promoted by the European Commission, highlighting their implications for VET systems in Kosovo and Albania. Participants examine how the transition toward sustainable production and consumption creates new job roles and transforms existing occupations, particularly in sectors like waste management, manufacturing, and energy. A key component focuses on identifying and integrating **green competencies into VET curricula**, including environmental awareness, sustainable resource management, and eco-innovation. Trainers learn methods for embedding these skills into teaching practices, learning outcomes, and assessment strategies. The module also addresses **industry needs and skill gaps**, using examples from the recycling and waste sector to illustrate how green skills align with labor market demands. Practical activities include mapping green skills, analyzing case studies, and designing curriculum adaptations. By the end of the unit, trainers will be able to support learners in acquiring relevant green competencies, contributing to sustainable development and enhancing employability in the context of the green and digital transition.	
1.5 Module: **Digital Transformation and Its Impact on VET and Industry Needs**		This module explores how **digital transformation** is reshaping industries and redefining skill requirements in Vocational Education and Training (VET). It introduces key concepts such as digitalization, automation, artificial intelligence, and Industry 4.0, highlighting their impact on productivity, job roles, and business models. The unit examines EU digital strategies promoted by the European Commission, focusing on their implications for workforce development in Kosovo and Albania. Participants analyze how digital technologies are transforming sectors such as waste management and recycling through smart systems, data monitoring, and process optimization. A central focus is on **digital skills for the future workforce**, including basic, intermediate, and advanced competencies required across occupations. Trainers explore how to integrate digital skills into VET curricula, teaching methods, and assessment	

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		practices. The module also addresses **emerging occupations and changing job profiles**, emphasizing the need for continuous upskilling and reskilling. Practical activities include analyzing digital trends, identifying skill gaps, and aligning training programs with industry needs. By the end of the unit, trainers will be able to adapt VET provision to support the digital transition and enhance learners' employability in evolving labor markets.	
1.6 Module: **Techniques for Forecasting Market and Employment Trends**		This module equips VET trainers with practical techniques to **forecast market and employment trends** and anticipate future skills needs. It begins with an introduction to forecasting concepts, including short-, medium-, and long-term projections, and their importance for aligning VET with labor market dynamics. The unit explores **qualitative and quantitative forecasting methods**, such as trend extrapolation, scenario building, Delphi method, and sectoral analysis. Trainers learn how to use labor market data from sources like Cedefop and Eurostat to identify patterns and predict future developments. A key focus is on **skills anticipation**, including identifying emerging occupations, green and digital skills, and potential skill gaps in sectors such as waste management and recycling. The module also addresses uncertainties and limitations in forecasting, encouraging critical thinking and evidence-based decision-making. Practical activities include developing simple forecasts, analyzing case studies, and applying results to **curriculum design and workforce planning**, ensuring VET systems remain responsive and future-oriented.	
1.7 Module: **Aligning VET Curricula with Industry and Sustainability Demands**		This module focuses on how VET trainers can **design and adapt curricula** to meet evolving industry needs and sustainability priorities. It begins with an overview of **competency-based education and training**, emphasizing alignment with labor market requirements, occupational standards, and qualification frameworks. The unit explores how policies and strategies from the European Commission and skills intelligence from Cedefop support curriculum modernization. Trainers exam-	

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		ine how industry trends—particularly in green transition, circular economy, and digitalization—translate into updated learning outcomes and training content. A key component addresses **methods for curriculum alignment**, including stakeholder engagement with employers, sector skills councils, and industry partners. Participants learn how to integrate **green and digital competencies**, transversal skills, and work-based learning elements into VET programs. The module also covers **curriculum review and quality assurance processes**, ensuring continuous improvement and responsiveness to market changes. Practical activities include mapping skills needs, redesigning modules, and developing learning outcomes aligned with sustainability goals. By the end of the unit, trainers will be able to create flexible, relevant, and future-oriented curricula that enhance employability and support sustainable economic development.	
1.8 Module: **Stakeholder Engagement: Industry, Policy, and Training Providers**		This module focuses on the role of **stakeholder engagement** in ensuring that VET systems remain responsive to industry needs and policy priorities. It begins by identifying key stakeholders, including employers, industry associations, public institutions, policymakers, and training providers, and explains their roles in shaping skills development ecosystems. The unit explores collaboration frameworks supported by the European Commission, emphasizing partnerships between education and industry to support the green and digital transition. Trainers examine mechanisms such as sector skills councils, public-private partnerships, and work-based learning models. A core component addresses **methods for effective engagement**, including communication strategies, stakeholder mapping, consultation processes, and co-creation of curricula. Participants learn how to gather input from stakeholders and integrate it into training design and delivery. The module also highlights **regional perspectives** in Kosovo and Albania, identifying challenges such as limited cooperation, skills mismatches, and institutional gaps, while presenting opportunities for strengthening collaboration.	

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		Practical activities include stakeholder analysis, designing engagement plans, and developing partnership strategies. By the end of the unit, trainers will be able to build strong, sustainable partnerships that enhance VET quality, relevance, and alignment with labor market and sustainability goals.	
1.9 Module: **Using Big Data and Digital Tools for Trend Interpretation**		This module introduces VET trainers to the use of **Big Data and digital tools** for interpreting industry and labor market trends, with a focus on evidence-based decision-making in vocational education. It begins by explaining the concept of Big Data, its characteristics (volume, velocity, variety), and its relevance for skills forecasting and labor market intelligence. The unit explores key **digital platforms and tools** used for data analysis, including labor market information systems, online job portals, dashboards, and data visualization software. Trainers learn how structured and unstructured data can be collected, processed, and transformed into meaningful insights. A central focus is placed on **trend interpretation techniques**, such as data mining, pattern recognition, and predictive analytics. The module highlights how these methods can be applied to identify emerging occupations, skills demand, and sectoral shifts, particularly in areas like waste management, recycling, and the green economy. The unit also addresses **data ethics, quality, and limitations**, ensuring responsible use of digital information in educational and policy contexts. Participants explore challenges such as data bias, reliability, and interpretation errors. Practical activities include analyzing real datasets, using visualization tools to interpret labor market trends, and developing simple dashboards for VET planning purposes. By the end of the module, trainers will be able to use Big Data tools effectively to support curriculum development, skills anticipation, and alignment with evolving industry needs.	
1.10 Module: **Case Studies:**		This module provides VET trainers with a comparative analysis of **waste manage-**	

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Waste and Recycling Practices in Kosovo, Albania, and the EU		**ment and recycling practices** across Kosovo, Albania, and EU countries, highlighting good practices, challenges, and opportunities for improvement. It begins with an overview of national waste management systems, regulatory frameworks, and institutional responsibilities in the three contexts. The unit examines **EU standards and policies** shaping sustainable waste management, including circular economy principles and recycling targets promoted by the European Commission. Trainers explore how EU Member States have developed advanced systems for waste collection, sorting, recycling, and resource recovery. A central component focuses on **case studies from Kosovo and Albania**, analyzing current infrastructure limitations, policy implementation gaps, informal recycling practices, and emerging reforms. These cases are compared with EU examples to identify transferable practices and innovation opportunities. The module also addresses **economic, environmental, and social impacts** of waste management systems, including job creation in green sectors and community engagement in recycling initiatives. Practical activities include case study analysis, group discussions, and comparative mapping exercises to identify strengths, weaknesses, and improvement pathways. Trainers learn how to translate case study insights into teaching materials and curriculum development. By the end of the unit, participants will be able to critically evaluate waste and recycling systems and integrate real-world examples into VET training to enhance relevance, sustainability awareness, and labor market alignment.	
1.1.	Paragraph	This module focuses on strengthening the capacity of VET trainers to interpret **industry and market trends** within the context of the green and digital transition, with special attention to the waste and recycling sector in Kosovo, Albania, and the EU. It provides trainers with conceptual and practical tools to understand how labor markets evolve under the influence of technological innovation, environmental policies,	

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		and economic restructuring. The content emphasizes the importance of using reliable data sources, labor market intelligence, and forecasting tools to identify emerging skills needs and changing occupational profiles. Trainers are guided to connect industry developments with VET curriculum design, ensuring alignment between training provision and real labor market demands. The module also highlights the role of sustainability-driven transformation, particularly circular economy principles, in reshaping employment opportunities and sectoral growth. Through applied examples and comparative analysis, participants develop the ability to translate complex market information into actionable insights for teaching and training improvement.	
	Note		
	Columns	Text column 1 • ***Industry trends are shaped by technological change***, EU green policies, and economic shifts in waste and recycling sectors • ***Circular economy principles*** drive demand for new green skills and sustainable job roles across Kosovo, Albania, and the EU. • ***Waste management*** sector transformation creates opportunities for innovation, recycling technologies, and green employment growth.	Image 
		Text column 2 • ***Market interpretation*** relies on data sources such as labor statistics, employer surveys, and sector reports for evidence-based analysis. • ***Digital tools and labor market intelligence platforms*** support forecasting of emerging occupations and skills gaps. • ***Comparative analysis between EU and Western Balkans*** highlights gaps in infrastructure, policy implementation, and workforce skills.	
		Text column 3	

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VET trainers use trend analysis to update curricula and ensure alignment with evolving skills and job market needs.
Collaboration with industry stakeholders ensures training relevance and improves employability outcomes for learners.
Continuous professional development of VET trainers is essential for adapting to fast-changing labor market conditions.

</td><td></td></tr>
<tr><td></td><td>Table</td><td>
<table>
<tr><td>Table</td><td>Column 1</td><td>Column 2</td><td>Column 3</td></tr>
<tr><td>Row 1</td><td>Industry trends are influenced by technological innovation, EU sustainability policies, and market transformation in the waste and recycling sector.</td><td>Labor market intelligence is based on data sources such as statistics, employer surveys, and sectoral reports for evidence-based interpretation.</td><td>VET trainers use this information to align curricula with current and future industry skill needs.</td></tr>
<tr><td>Row 1</td><td>The circular economy and green transition are reshaping employment structures and creating new job profiles in recycling and waste management.</td><td>Digital tools and forecasting methods help identify emerging skills gaps and anticipate future labor market demands.</td><td>Collaboration with industry stakeholders ensures relevance, quality, and employability outcomes in VET provision.</td></tr>
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<tr><td></td><td>Divider</td><td>By default, dividers are labeled as CONTINUE, but you can customize this label as needed.</td><td></td></tr>
<tr><td>2.</td><td>Statement</td><td>This unit equips VET trainers with the knowledge and analytical skills to interpret industry and market trends within the context of the green and digital transition, focusing on the waste and recycling sector. It emphasizes the use of reliable data</td><td></td></tr>
</table>

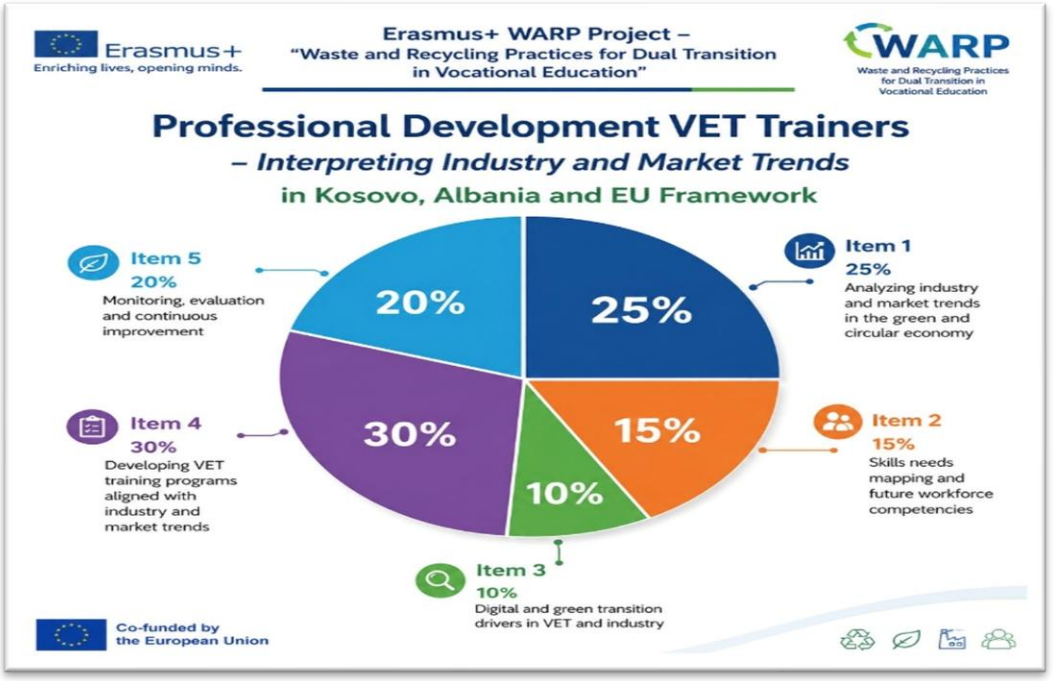
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		sources, labor market intelligence, and forecasting tools to understand evolving skills demands, emerging occupations, and sectoral changes in Kosovo, Albania, and the EU. The module supports trainers in translating market insights into curriculum development, ensuring alignment between vocational education and labor market needs while promoting sustainability and circular economy principles.	
3.	List	• Item 1 Understanding key industry and market trends influencing the waste and recycling sector • Item 2 Using labor market intelligence and data sources for evidence-based interpretation • Item 3 Applying trend analysis to improve VET curricula and align training with future skills needs	Use a bulleted list
4.	Chart	• Item 1 **(25%)** – Analysis of Industry Transformation and Emerging Skills Needs in EU and Western Balkans VET Sectors • Item 2 **(15%)** – Mapping Labour Market Trends and Their Impact on Vocational Education and Training • Item 3 **(10%)** – Digital and Green Transition Requirements for VET Trainers' Professional Development • Item 4 **(30%)** – Curriculum Adaptation and Methodologies for Interpreting Market Trends in VET Practice • Item 5 **(20%)** – Policy Alignment, Quality Assurance, and Cross-Border Cooperation in VET Systems	Use a line chart

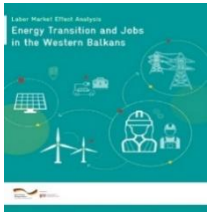
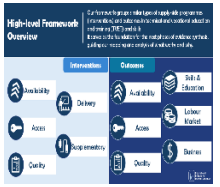
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5. Image Analysis of Industry Transformation and Emerging Skills Needs in EU and Western Balkans VET Sectors	Image	*Write caption here (optional)* The transformation of industry across the European Union (EU) and the Western Balkans is being driven by two major forces: the green transition and digitalization. In the EU, policies such as the European Green Deal and Circular Economy Action Plan are accelerating the shift toward sustainable production systems, resource efficiency, and advanced recycling technologies. This transformation requires a workforce equipped with new competencies, including green skills, digital literacy, data analysis, and the ability to adapt to rapidly evolving technologies. In contrast, countries in the Western Balkans, including Kosovo and Albania, are progressing at different speeds in adopting these transformations. While there is increasing alignment with EU strategies, challenges remain in terms of infrastructure,	Image centered

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		investment, and institutional capacity. As a result, there is a growing skills gap between labour market needs and the competencies provided through existing VET systems. Vocational Education and Training (VET) institutions play a crucial role in addressing this gap by updating curricula, integrating real-time labour market intelligence, and strengthening cooperation with industry stakeholders. Emerging skills needs in the region include waste management optimization, recycling technologies, environmental monitoring, digital tools for resource tracking, and sustainable business practices. Furthermore, the analysis of industry trends highlights the importance of transversal skills such as critical thinking, problem-solving, collaboration, and adaptability. VET trainers must be able to interpret market signals, anticipate future skills demands, and translate these into relevant training programs. This requires continuous professional development and exposure to both EU best practices and local industry realities. By understanding the dynamics of industry transformation and emerging skills needs, VET trainers can contribute to building more responsive, inclusive, and future-oriented education systems that support sustainable economic development in both the EU and Western Balkan contexts. **Caption (optional):** *Comparison of industry transformation drivers and emerging green and digital skills needs in EU and Western Balkan VET sectors.*	 
5. Image Mapping Labour Market Trends and Their Impact on Vocational Education and	Image	*Write caption here (optional)* Mapping labour market trends is a critical component in ensuring that Vocational Education and Training (VET) systems remain relevant, responsive, and aligned with economic and societal needs. In the context of the European Union (EU) and the Western Balkans, labour markets are undergoing significant transformation due to technological advancement, digitalization, globalization, and the transition toward a circular and green economy.	Image full width 

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Training		This process involves the systematic collection, analysis, and interpretation of labour market intelligence, including employment statistics, sector growth patterns, emerging occupations, and skills demand. Key sources such as national statistical agencies, industry reports, and EU databases (e.g., Eurostat, ESCO) provide valuable insights into current and future workforce needs. For VET trainers, the ability to interpret this data is essential for adapting training content and methodologies. In Kosovo and Albania, labour market mapping is particularly important due to evolving economic structures and the need to align with EU standards. Challenges such as skills mismatches, youth unemployment, and limited industry-education cooperation highlight the importance of data-driven decision-making in VET. By identifying priority sectors—such as waste management, recycling, environmental services, and green technologies—trainers can better tailor curricula to meet market demands. The impact on VET is substantial. Labour market trends inform curriculum development, qualification standards, and teaching approaches. They also support the integration of work-based learning, apprenticeships, and partnerships with industry. Furthermore, mapping trends enables VET institutions to anticipate future changes, such as automation or new environmental regulations, and proactively prepare learners with relevant skills. Ultimately, this approach enhances employability, supports economic development, and ensures that VET systems contribute effectively to sustainable and inclusive growth. VET trainers, as key actors in this process, must continuously engage with labour market data and translate insights into innovative and flexible training practices. **Caption (optional):** *Process of mapping labour market trends and their influence on curriculum design and skills development in VET systems.*	
5. Image	Image	Write text here.	Image and text

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Digital and Green Transition Requirements for VET Trainers' Professional Development		*Write caption here (optional)* The dual transition—digital and green—represents a fundamental shift in how economies operate and how skills are developed within Vocational Education and Training (VET) systems. For VET trainers, this transition requires continuous professional development to acquire new competencies that reflect both technological advancement and sustainability imperatives. The digital transition demands that trainers develop strong digital competencies, including the use of learning management systems, data analytics tools, virtual collaboration platforms, and digital content creation. Trainers must also be able to integrate digital technologies into teaching practices, such as simulation tools, online assessments, and interactive learning environments. Moreover, understanding digital trends in industry—such as automation, artificial intelligence, and smart waste management systems—is essential for aligning training with labour market needs. At the same time, the green transition requires VET trainers to incorporate sustainability principles into their teaching. This includes knowledge of circular economy models, waste reduction strategies, recycling technologies, and environmental regulations. Trainers must be able to embed green skills into curricula, promoting resource efficiency, environmental responsibility, and sustainable innovation across different vocational fields. In Kosovo and Albania, the need for upskilling and reskilling VET trainers is particularly important as both countries align with EU standards and respond to evolving labour market demands. Professional development programs should therefore focus on interdisciplinary competencies that combine digital literacy with environmental awareness. This includes the ability to interpret market trends, adapt training content, and apply innovative teaching methodologies that support the dual transition. Furthermore, VET trainers are expected to act as change agents within their institutions, fostering a culture of innovation, sustainability, and lifelong learning. By developing both digital and green competencies, trainers can enhance the quality and	

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		relevance of VET provision, ensuring that learners are equipped with the skills needed for future jobs in a rapidly transforming economy. **Caption (optional):** *Integration of digital competencies and green skills as core requirements for VET trainers' professional development in the context of the dual transition.*	
5. Image Curriculum Adaptation and Methodologies for Interpreting Market Trends in VET Practice	Image	*Write captions here (optional)* Curriculum adaptation in Vocational Education and Training (VET) is essential to ensure that learning content remains relevant in the face of rapidly evolving industry and labour market trends. In the context of the green and digital transition, VET curricula must be continuously updated to reflect new technologies, sustainability requirements, and emerging occupational profiles, particularly in sectors such as waste management and recycling. This process involves aligning training programmes with labour market intelligence by integrating data from industry reports, employer feedback, and national and EU-level policy frameworks. VET trainers play a central role in this adaptation by translating market trends into learning outcomes, competencies, and practical training activities. This includes embedding green skills, digital competencies, and transversal skills such as problem-solving, critical thinking, and adaptability. Methodologically, interpreting market trends in VET practice requires a shift toward more flexible, learner-centered, and competency-based approaches. These include project-based learning (PBL), problem-solving tasks, case study analysis, and work-based learning. Trainers are encouraged to use real data and industry scenarios to help learners understand how market dynamics influence skills demand and professional practice. In Kosovo and Albania, curriculum adaptation must also consider local economic conditions, institutional capacities, and sector-specific needs while maintaining alignment with EU standards. This ensures that training is both contextually relevant and internationally comparable. Additionally, collaboration with industry partners is	Carousel with 3 images  

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		crucial for validating curriculum changes and ensuring that training reflects current workplace practices. By adopting innovative methodologies and continuously updating curricula, VET trainers can enhance the responsiveness and quality of vocational education. This contributes to better learner outcomes, improved employability, and stronger alignment between education and labour market needs in a rapidly changing economic environment. **Caption (optional):** *Process of adapting VET curricula and teaching methodologies based on labour market trends and industry requirements.*	
5. Image Policy Alignment, Quality Assurance, and Cross-Border Cooperation in VET Systems	Image	*Write captions here (optional)* Policy alignment, quality assurance, and cross-border cooperation are key pillars for strengthening Vocational Education and Training (VET) systems in the context of the European integration process and the dual green and digital transition. Aligning national VET policies in Kosovo and Albania with European Union (EU) frameworks ensures consistency, transparency, and comparability of qualifications, while also supporting labour mobility and regional cooperation. Policy alignment involves integrating EU directives, strategies, and tools—such as the European Qualifications Framework (EQF), quality assurance frameworks, and sustainability policies—into national education and training systems. This enables VET institutions to modernize curricula, improve governance, and respond more effectively to labour market demands, particularly in sectors like waste management and recycling. Quality assurance plays a crucial role in maintaining the relevance and effectiveness of VET provision. It includes the establishment of standards, monitoring mechanisms, and continuous evaluation processes to ensure that training outcomes meet both industry requirements and educational objectives. For VET trainers, this means adopting evidence-based teaching practices, using performance indicators, and engaging in continuous professional development.	

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		Cross-border cooperation between Kosovo, Albania, and EU countries enhances knowledge exchange, capacity building, and the transfer of best practices. Through joint projects, mobility programs, and institutional partnerships, VET providers can learn from diverse experiences and develop innovative solutions tailored to regional needs. This cooperation also facilitates the harmonization of training standards and promotes mutual recognition of qualifications. Furthermore, collaboration with industry stakeholders across borders supports the development of relevant training programs and strengthens the link between education and employment. By integrating policy alignment, quality assurance, and cross-border cooperation, VET systems can become more resilient, inclusive, and responsive to the challenges of a rapidly changing labour market. **Caption (optional):** *Integration of EU policy alignment, quality assurance mechanisms, and cross-border cooperation to enhance VET system effectiveness and regional harmonization.*	
6. Video & audio Understanding key industry and market trends influencing the waste and recycling sector	Video	"In recent years, the waste and recycling sector has undergone significant transformation driven by environmental regulations, technological innovation, and the global shift toward a circular economy. In the European Union, policies such as the European Green Deal and Circular Economy Action Plan have accelerated the adoption of sustainable waste management practices, including waste reduction, reuse, and advanced recycling systems. In Kosovo and Albania, the sector is developing, with increasing efforts to align with EU standards. However, challenges remain, including limited infrastructure, low recycling rates, and the need for stronger institutional coordination. At the same time, new opportunities are emerging in areas such as digital waste tracking systems, green jobs, and environmental services. Key industry trends include the integration of smart technologies, the growth of green entrepreneurship, stricter environmental regulations, and increased public awareness of sustainability. These trends are reshaping the skills required in the la-	Vdeo file: https://www.youtube.com/watch?v=K6ppCC3lboU&pp=ygVdVW5kZXJzdGFuZGluZyBrZXkgaW5kdXN0cnkgYW5kIG1hcmtldCB0cmVuZHMgaW5mbHVlbmNpbmcgdGhlIHdhc3RlIGFuZCByZWN5Y2xpbmcgc2Vjd

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		bour market, emphasizing technical knowledge, digital competencies, and environmental awareness. For VET trainers, understanding these trends is essential to ensure that training programs remain relevant and responsive to industry needs. By integrating real-world developments into teaching, trainers can better prepare learners for future employment in the waste and recycling sector."	G9yIHZpZGVv
6. Video & audio Using labor market intelligence and data sources for evidence-based interpretation	Video	**Video Link:** https://example.com/labour-market-intelligence-vet	**Video Link:** https://example.com/labour-market-intelligence-vet
6. Video & audio Applying trend analysis to improve VET curricula and align training with future skills needs	Audio	**Video Transcription (for captions):** "Applying trend analysis in vocational education and training is essential for aligning curricula with current and future labour market needs. This process involves collecting and analyzing data from multiple sources, such as employment statistics, industry reports, and policy documents, to identify emerging skills and sectoral developments. In the context of waste management and recycling, trend analysis helps identify new occupational profiles, such as recycling technicians, environmental data analysts, and sustainability managers. It also highlights the increasing importance of transversal skills, including problem-solving, adaptability, and collaboration. VET trainers play a critical role in translating these insights into curriculum improve-	Audio file https://www.youtube.com/watch?v=yhheD-MLHSq0

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		ments. This includes updating learning outcomes, integrating practical training activities, and adopting innovative teaching methodologies such as project-based learning and real case studies. By applying trend analysis, VET institutions can ensure that their programs remain dynamic, relevant, and aligned with both national priorities and EU frameworks. This ultimately enhances the employability of learners and supports the transition toward a more sustainable and competitive economy."	
7. Files	File	**Additional Description / Instructions:** **??This file contains supplementary learning materials designed to support the understanding and application of industry and mark**et trend analysis within the waste and recycling sector. It may include datasets, policy excerpts, case studies, templates, or guidelines relevant to Vocational Education and Training (VET) systems in Kosovo, Albania, and the European Union. Participants are expected to review the file carefully and use it as a reference for completing learning activities, group work, and project-based assignments. The materials provided should be analyzed critically, with particular attention to how industry trends, labour market data, and sustainability frameworks can be translated into VET curricula and training practices. Learners are encouraged to: • Identify key insights and trends presented in the file • Relate the content to their national and institutional context • Use the information to support evidence-based decision-making • Apply the materials when developing their final project (e.g., waste management plan or curriculum adaptation) Trainers may also use this file to facilitate discussions, practical exercises, and collaborative learning activities. It is recommended that participants integrate the knowledge gained from this resource with other unit materials, including case studies, digital tools, and industry visits.	

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		Overview: This professional development module is designed to equip Vocation Education and Training (VET) trainers with the skills to identify, interpret, and integrate current industry and market trends into their training and assessment strategies. It emphasizes maintaining industry currency to ensure training is relevant, effective, and meets the evolving needs of employers and learners.  Cloud Assess +3 *****File: Module_Guide_Interpreting_Industry_Trends.pdf?** • **Description:** This module guide explores key trends, including the impact of Generative AI, digital transformation, and the transition toward green skills, as essential components of contemporary VET delivery. • **Key Learning Areas:** ○ **Industry Currency:** Strategies for trainers to remain connected with current industry best practices and standards. ○ **Digital Transformation & AI:** Identifying how Artificial Intelligence, digital tools, and cybersecurity impact sector-specific skills. ○ **Sustainable Practices:** Integrating green skills into curriculum. ○ **Industry Collaboration:** Developing stronger partnerships with Jobs and Skills Councils (JSCs) and employers. • **Instructions:** • Review the "Top Vocational Education and Training (VET) Trends in 2026" section to understand the shift toward skills-based education. • Complete the "Boundary Crossing" activity to develop an action plan for updating your industry knowledge. • Develop a new learning activity that incorporates AI tools or digital literacy skills into your subject area.	

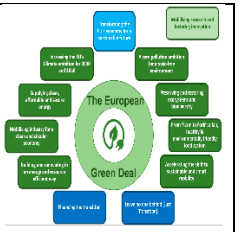
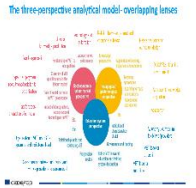
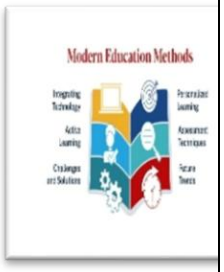
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		•  NCVER +4 **Key Trends & Context for VET Trainers (2025-2026)** • **Shifting Landscape:** VET is moving toward higher-level qualifications and greater diversity in programs to meet service sector needs. • **Workforce Challenges:** Ageing trainer demographics and a need for greater industry expertise in the classroom. • **Technology Integration:** Increased use of eLearning, virtual reality (VR), and AI in delivery and assessment. • **RPL Focus:** Expanding Recognition of Prior Learning to help experienced industry professionals formalize their skills. •  Cloud Assess +3 This module supports VET providers in maintaining compliance and delivering high-quality, industry-aligned education. **Note:** The file may be provided in different formats (e.g., PDF, Excel dataset, Word document), depending on the specific learning activity.	
8. Accordion and tabs	Accordion	**Header:** *Industry Transformation and Skills Demand in the Green and Digital Economy* **Text/Description:** This section explores how the transition toward a green and digital economy is reshaping industries across the European Union and the Western Balkans. It focuses on key drivers such as sustainability policies, technological innovation, and circular economy principles. Participants will examine how these transformations influence	image

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		labour market demand, particularly in sectors like waste management and recycling. The content emphasizes emerging job profiles, required competencies, and the growing importance of interdisciplinary skills. VET trainers will gain insights into how to interpret these changes and integrate them into teaching and training practices.	
	Accordion	**Header:** *Labour Market Intelligence and Data-Driven Decision Making in VET* **Text/Description:** This section introduces the concept of labour market intelligence (LMI) and its role in shaping effective VET systems. It highlights the importance of using data from sources such as national statistics, industry reports, and EU databases to understand employment trends and skills needs. Participants will learn how to collect, analyze, and interpret labour market data to inform curriculum design and training delivery. The section also addresses challenges in Kosovo and Albania, including skills mismatches and limited data integration, while promoting evidence-based approaches for improving VET relevance and responsiveness.	
8. Accordion and tabs	Tab	**Header:** *Curriculum Adaptation and Innovative Teaching Methodologies* **Text/Description:** This tab focuses on strategies for adapting VET curricula to reflect evolving industry and market trends. It introduces innovative teaching methodologies such as project-based learning, problem-solving approaches, and work-based learning. Participants will explore how to integrate green and digital skills into training programs, ensuring alignment with labour market demands. The content also emphasizes the importance of collaboration with industry partners and continuous curriculum review to maintain relevance and quality in vocational education.	Image 
	Tab	**Header:** *EU Alignment, Quality Assurance, and Cross-Border Cooperation* **Text/Description:** This section examines the role of EU frameworks in guiding VET development and	Video file: https://www.youtube.com/wat

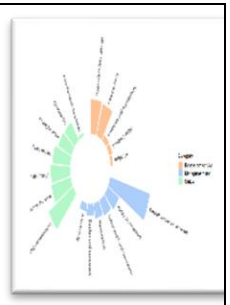
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		ensuring quality and comparability across countries. It highlights tools such as qualification frameworks, quality assurance mechanisms, and mobility programs that support harmonization and cooperation. Participants will explore how Kosovo and Albania can align their VET systems with EU standards while adapting them to local contexts. The tab also emphasizes the value of cross-border partnerships, knowledge exchange, and collaborative projects in strengthening institutional capacity and enhancing training outcomes.	ch?v=sWdmTS5oJTM
9. Labeled graphic	Labeled graphic	**Marker 1: Image Hotspot** **Description:** ***Industry Overview Perspective (Air Balloon)*** This visual element represents an air balloon, symbolizing overview, perspective, and the ability to "see the bigger picture" when interpreting industry and market trends. In the context of VET training, it reflects the importance of understanding macro-level developments such as global sustainability shifts, technological innovation, and labour market dynamics. Trainers are encouraged to use such visual metaphors to help learners grasp complex concepts more intuitively. **Content displayed on click:** This image represents an air balloon symbolizing strategic overview and future orientation in VET systems. It reflects the ability of VET trainers to "rise above" local challenges and understand global industry transformations, especially in the green and digital transition. **Learning Focus:** • Systems thinking in VET • Understanding global industry trends • Strategic interpretation of labour market changes	Image 
		Marker 2: infographic Hotspot **Description:** ***Data Visualization in Sustainability (Lakes Infographic)*** This infographic about lakes serves as an example of how complex data and environmental information can be presented in a clear and engaging way. In VET practice, similar infographics can be used to visualize data related to waste management,	Image

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		recycling rates, or environmental impact. The goal is to enhance learners' ability to interpret visual data and connect it to real-world sustainability challenges and industry trends. **Content displayed on click:** This infographic demonstrates how environmental and industrial data can be visualized to support decision-making. In VET practice, similar tools are used to interpret recycling rates, waste flows, and environmental impact indicators. **Learning Focus:** • Data interpretation skills • Environmental indicators • Evidence-based VET planning	
		Marker 3: Audio Hotspot **Description:** ***Expert Insights on Market Trends*** This audio component provides additional explanatory content, allowing learners to engage with the material through auditory means. It may include expert insights, case study explanations, or reflections on industry practices. Audio learning supports accessibility and flexible learning, enabling participants to deepen their understanding of market trends and their implications for VET systems. **Content displayed on click:** This audio segment provides additional explanation on how industry trends influence vocational education. It supports learners in understanding how labour market intelligence can be translated into curriculum design and training strategies. **Learning Focus:** • Listening-based learning • Interpretation of expert knowledge • Linking industry trends to VET practice	Audio https://www.youtube.com/watch?v=A8OymkZgm7s
		Marker 4: Text **Description:** This is a mountain In the context of vocational education and training, the mountain can be used as a	

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		visual metaphor representing challenges, progress, and long-term development in interpreting industry and market trends. Just as climbing a mountain requires planning, resilience, and step-by-step progression, VET trainers must gradually build competencies in analysing labour market data, understanding sectoral changes, and adapting curricula to evolving needs.	
10.Scenario **Based Learning (Interactive Escape Room Design) Title: *"Decoding Industry and Market Trends in VET Systems"***	Scenario	**Slide 1** **1.Character and background** **Character:** A senior VET consultant / middle-aged businesswoman working for a regional skills and labour market intelligence unit in Kosovo–Albania–EU cooperation framework. **Background:** She works in a policy and training support office that analyzes industry and labour market trends for the waste and recycling sector. Recently, the system has become overloaded with data, conflicting reports, and unclear industry signals. She must quickly interpret information, make decisions, and align VET training recommendations with real market needs. **2.Instructions** Navigate through different customer and stakeholder scenarios by applying analytical thinking, empathy, and labour market interpretation skills. Each correct answer will help you "escape" from the room by unlocking the next level of decision-making. • Analyze industry and market trend information • Identify correct VET responses to labour market needs • Apply empathy when dealing with stakeholders (industry, learners, policy-makers) • Select the most appropriate training and policy solutions ✓ Each correct decision = progress to next level ❌ Incorrect decision = return to review data and try again	

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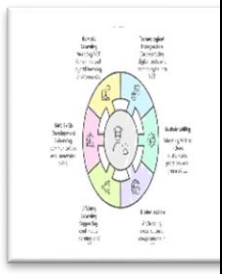
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		Slide 2 **Scenario**. You are inside a **VET Policy Analysis Office** receiving urgent requests from three stakeholders: 1. **Waste Management Company (Industry Partner)** o Requests skilled workers in recycling technology and digital waste tracking systems o Complains about lack of job-ready graduates 2. **VET School Director** o Wants to update curriculum but lacks clear labour market data o Unsure which skills should be prioritized for future training programs 3. **Government Policy Advisor** o Requests alignment with EU Green Deal and circular economy standards o Needs evidence-based recommendations for national VET reform **Task** Must be analyzed: • Analyze all three perspectives • Identify key labour market signals • Decide which training priorities should be implemented first • Ensure alignment between industry needs, education system, and EU standards * Only one decision path leads to the correct VET strategy.	
		Slide 3 **Closing text** Congratulations! You have successfully navigated complex industry and market scenarios. By completing this simulation, you have demonstrated the ability to:	

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Interpret labour market trends
Balance stakeholder needs
Apply empathy and analytical thinking in decision-making
Align VET training with EU and regional sustainability goals

In real VET systems, these skills are essential for ensuring that education remains relevant, responsive, and future-oriented in a rapidly changing labour market.
Final Reflection:
How can you apply these decision-making skills in your own VET teaching or institutional context?
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<tr>
<td>11.Timeline</td>
<td>Timeline</td>
<td>
Timeline Overview (2025–2026)
<table>
<tr><th>Activity / Phase</th><th>2025</th><th>2026</th><th>Description</th></tr>
<tr><td>Phase 1: Capacity Building</td><td></td><td></td><td>Training VET trainers
dustry trends, labou
ket intelligence, EU
works</td></tr>
<tr><td>Labour Market Analysis Skills</td><td></td><td></td><td>Introduction to
sources (Eurostat, ES
dustry reports)</td></tr>
<tr><td>EU Policy Integration</td><td></td><td></td><td>Green Deal, Circular
omy, VET alignment</td></tr>
<tr><td>Cross-border Knowledge Exchange</td><td></td><td></td><td>Cooperation betwee
sovo, Albania, EU pa
begins</td></tr>
<tr><td>Phase 2: Curricu-</td><td></td><td></td><td>Applying knowledge
VET curriculum redes</td></tr>
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lum Implementation			
Pilot Training Activities		[redacted]	Testing new modules in institutions
Industry Collaboration		[redacted]	Engagement with waste & recycling companies
Evaluation & Quality Assurance		[redacted]	Measuring impact and improving VET delivery

Date 1: 2025

In 2025, the focus of the unit is on the **initial capacity building of VET trainers** in Kosovo, Albania, and EU partner institutions. This phase introduces foundational knowledge on interpreting industry and market trends, with a particular emphasis on the waste and recycling sector within the green and digital transition framework. During this period, participants will:

- Develop basic skills in labour market analysis and data interpretation
- Explore EU policy frameworks such as the Green Deal and Circular Economy Action Plan
- Identify key skills gaps in national VET systems
- Participate in introductory workshops, case studies, and collaborative learning activities
- Begin mapping local industry needs and comparing them with EU standards

This stage establishes a shared understanding of how industry transformation influences vocational education and training systems.

Date 2: 2026

In 2026, the unit shifts toward **advanced application and implementation of knowledge** gained in the first phase. VET trainers focus on applying labour market

Add audio (filename.mp3)

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		intelligence and industry trend analysis to real curriculum development and institutional improvement. During this phase, participants will: • Apply trend analysis to redesign or update VET curricula • Develop innovative training modules aligned with green and digital skills needs • Strengthen cross-border cooperation between Kosovo, Albania, and EU partners • Implement pilot activities, including workplace-based learning and industry collaboration • Evaluate the impact of training adaptations on learner outcomes and employability This phase emphasizes practical application, institutional change, and sustainability of VET improvements in line with European standards.	
12.Flashcards	Flashcards	**Flashcard 1** **Front:** Image *Image concept:* A modern recycling facility with sorting machines, workers, and digital monitoring systems. **Back:** Text This image represents the **waste and recycling industry transformation** driven by digital and green technologies. It highlights how automation, smart systems, and environmental regulations are reshaping the sector. VET trainers must understand these changes to align training content with real labour market needs and emerging green skills.	Image 
		Flashcard 2 **Front:** Image *concept:* EU and Western Balkans collaboration map showing Kosovo, Albania, and EU countries connected with arrows. **Back:** Image *concept:* Circular economy diagram (Reduce – Reuse – Recycle) with industry, education, and policy links. **Meaning:**	

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		This flashcard illustrates the **connection between regional cooperation and circular economy principles**. It shows how Kosovo and Albania align with EU frameworks through shared policies, knowledge transfer, and sustainable development models in VET systems.	
		Flashcard 3 **Front:** Text "Labour market trends are essential for shaping future skills in vocational education." **Back:** Image *concept:* Data dashboard showing labour market statistics, graphs, and skill demand trends in the waste and recycling sector. **Meaning:** This visual represents the use of **labour market intelligence and data analysis** in VET decision-making. It emphasizes how trainers interpret data to update curricula, identify skills gaps, and improve employability outcomes in a rapidly changing economy.	
13. Multiple choice and multiple response	Multiple choice	**Question 1: Which of the following best describes the purpose of labour market intelligence (LMI) in VET systems?** **Answer 1:** To design training programs based on employer preferences only **Feedback:** Incorrect. Labour market intelligence is broader and includes data from multiple sources, not only employer opinions. **Answer 2:** To collect and analyze data on skills demand, employment trends, and sectoral changes to improve VET decision-making **Feedback:** Correct. LMI supports evidence-based curriculum design and alignment with labour market needs.	Specify here the right answer.
13. Multiple choice and multiple response	Multiple answer	**Question 2: Which factors are key drivers of change in the waste and recycling sector in the EU and Western Balkans? (Multiple response)** **Answer 1:** Green transition policies and circular economy strategies **Feedback:** Correct. These EU policies strongly influence industry transformation and	Specify here the right answers.

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		skills demand. **Answer 2:** Reduction of digital technologies in industry processes **Feedback:** Incorrect. Digitalization is increasing, not decreasing, especially in waste tracking and recycling systems.	
14. Matching and fill in the blank	Matching	**Instructions**: Match the correct concept from the **left column** with the appropriate description or application in VET practice from the **right column**. Then complete the missing parts in the sentences. **Matching Task** **First Choice / First Match** **Labour Market Intelligence (LMI)** **Correct Match:** A system of collecting and analysing data on employment trends, skills demand, and sector developments. **Second Choice / Second Match** **Circular Economy** **Correct Match:** An economic model focused on reducing waste, reusing materials, and recycling resources in production cycles. **Third Choice / Third Match** **VET Curriculum Adaptation** **Correct Match:** The process of updating training programs to align with industry trends and labour market needs.	
14. Matching and fill in the blank	Fill in the blank	**Fill in the Blank:** Complete the sentences using the correct terms: **Sentence 1** VET trainers use _____ to understand skills demand and labour market changes. **Answer:** Labour Market Intelligence (LMI) **Sentence 2**	Specify here the missing word or words.

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		The _____ promotes reducing waste and increasing recycling and reuse of materials. **Answer:** Circular Economy **Sentence 3** Updating training content based on industry changes is called _____. **Answer:** VET Curriculum Adaptation	

5 Activities (examples)

Module 1: Professional Development VET Trainers: Interpreting Industry and Market Trends			
Module number & title	**Activity type**	**Activity development**	**Notes**
Flashcards	Flashcards	**Activity 1: Labour Market Trend Analysis Workshop** **Activity type:** Group analytical activity (data interpretation workshop) **Activity development:** Participants are divided into small groups and provided with real or simulated labour market data (Eurostat, ESCO, national reports). They analyze trends in the waste and recycling sector, identify emerging skills needs, and present key findings. Trainers facilitate discussion on how these	Image 

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		trends influence VET curriculum development. The activity strengthens data interpretation skills and supports evidence-based decision-making in vocational education. **Flashcard 1** **Front:** Image: concept: A labour market dashboard showing graphs, charts, and skills demand data for the waste and recycling sector. **Back:** Text: This image represents **labour market intelligence (LMI)** used in VET systems to analyze employment trends, skills gaps, and sector development. VET trainers use such data to design evidence-based training programs aligned with industry needs in the green and digital economy.	
Flashcards	Flashcards	**Activity 2: Curriculum Adaptation Simulation** **Activity type:** Problem-solving and design-based learning activity	

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		Activity development: Participants work in groups to redesign a selected VET module based on identified industry trends. They must integrate green and digital skills, align learning outcomes with EU frameworks, and ensure relevance to Kosovo and Albania labour market needs. Each group presents their adapted curriculum and justifies changes based on labour market evidence and policy alignment. **Flashcard 2** **Front:** Image concept: A VET curriculum document being digitally edited with green skills icons and digital tools symbols. **Back:** Image concept: Circular economy diagram (Reduce – Reuse – Recycle) combined with digital transformation icons (AI, data, automation). **Meaning:** This flashcard illustrates how VET curricula are adapted by integrating **green skills and digital com-**	

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		petencies. It shows the connection between industry trends, sustainability requirements, and training design aligned with EU frameworks.	
Flashcards	Flashcards	**Activity 3: Stakeholder Role-Play (Industry–Education Dialogue)** **Activity type:** Role-play and collaborative communication activity **Activity development:** Participants simulate a meeting between VET trainers, industry representatives, and policy makers. Each group represents a stakeholder perspective (e.g., recycling company, VET institution, government agency). The goal is to negotiate training priorities based on industry needs, labour market data, and sustainability goals. This activity develops communication, negotiation, and empathy skills while reinforcing the connection between education and industry. **Flashcard 3**	

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		Front: Text: "Different stakeholders in VET systems (industry, education providers, and policy makers) must collaborate to ensure training programs match labour market needs." **Back:** Image concept: Roundtable meeting showing industry representatives, VET trainers, and policy makers discussing skills development strategies. **Meaning:** This visual represents **collaborative decision-making in VET systems**, where stakeholders align training priorities with labour market demand, sustainability goals, and EU policy frameworks.	
Multiple choice and multiple response	Multiple choice	**Question 1: Which of the following best describes the purpose of labour market intelligence (LMI) in VET systems?** **Answer 1:** To design training programs based on employer preferences only **Feedback:** Incorrect. Labour market intelligence is broader and includes data from multiple	Specify here the right answer.

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		sources, not only employer opinions. **Answer 2:** To collect and analyze data on skills demand, employment trends, and sectoral changes to improve VET decision-making **Feedback:** Correct. LMI supports evidence-based curriculum design and alignment with labour market needs.	
Multiple choice and multiple response	Multiple answer	**Question 2: Which factors are key drivers of change in the waste and recycling sector in the EU and Western Balkans? (Multiple response)** **Answer 1:** Green transition policies and circular economy strategies **Feedback:** Correct. These EU policies strongly influence industry transformation and skills demand. **Answer 2:** Reduction of digital technologies in industry processes **Feedback:** Incorrect. Digitalization is increasing, not decreasing, especially in waste tracking and	Specify here the right answers.

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		recycling systems.	
Matching and fill in the blank	Matching	**Instructions**: Match the correct concept from the **left column** with the appropriate description or application in VET practice from the **right column**. Then complete the missing parts in the sentences. **First Choice / First Match**: **Labour Market Intelligence (LMI)** **Correct Match:** A system of collecting and analysing data on employment trends, skills demand, and sector developments. **Second Choice / Second Match: Circular Economy** **Correct Match:** An economic model focused on reducing waste, reusing materials, and recycling resources in production cycles. **Third Choice / Third Match: VET Curriculum Adaptation** **Correct Match:** The process of updating training programs to align with industry trends and labour market needs.	

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Matching and fill in the blank	Fill in the blank	**Fill in the Blank:** Complete the sentences using the correct terms: **Sentence 1** VET trainers use _____ to understand skills demand and labour market changes. **Answer:** Labour Market Intelligence (LMI) **Sentence 2** The _____ promotes reducing waste and increasing recycling and reuse of materials. **Answer:** Circular Economy **Sentence 3** Updating training content based on industry changes is called _____. **Answer:** VET Curriculum Adaptation	Specify here the missing word or words.
Digital map	Digital map	**Digital Map Activity: Creation of a Digital Map of Local Recycling Points (or Similar Sustainability Infrastructure)** **Activity Overview:** Participants will collaboratively create a **digital map** identifying and analysing local recycling points, waste collection centers, and sustainability	

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		infrastructure relevant to Kosovo, Albania, and the EU context. The activity supports the interpretation of **industry and market trends in the waste management sector** by linking geographical data with labour market and environmental systems. **Instructions** Participants will: • Identify key recycling points, waste collection stations, and sorting facilities in their local area • Use digital mapping tools (e.g., Google My Maps, ArcGIS Online, or similar platforms) • Classify locations by type (plastic, paper, glass, electronic waste, organic waste) • Add short descriptions including: ○ Function of the facility ○ Type of materials processed	

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		○ Link to local or national waste management systems • Compare regional differences between Kosovo, Albania, and selected EU countries **Learning Objectives** • Develop digital mapping and spatial analysis skills • Understand local and regional waste management systems • Connect geographical data with labour market and industry trends • Strengthen awareness of circular economy practices in real contexts • Support evidence-based interpretation of sustainability infrastructure **Output / Product** • A **shared interactive digital map** showing recycling infrastructure • Group presentation of findings and comparisons between regions	

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		• Reflection report on how local systems align with EU sustainability standards **Caption (optional)** *Interactive digital mapping of recycling infrastructure as a tool for analysing waste management systems and industry trends in VET contexts.*	
Design of a small waste-separation system within the institution		**Activity Description:** Participants will design a **practical waste-separation system** to be implemented within their VET institution (school, training centre, or campus). The activity connects **industry and market trends in waste management** with real institutional practice, supporting the development of green skills and sustainable behaviours. The system should reflect **EU circular economy principles** and be adapted to the local context of Kosovo and Albania. **Task Instructions** Participants will: • Analyze current waste generation within the institution (paper, plastic,	

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		organic, electronic waste) • Design a **waste separation model** suitable for classrooms, offices, and common areas • Define categories and labeling system for waste bins (e.g., recyclable / non-recyclable / organic / hazardous) • Propose a **collection and monitoring process** (who collects, how often, and where waste goes) • Integrate awareness-raising actions for students and staff • Align the system with EU waste management and circular economy principles **Design Components** The system must include: • **Separation Points:** clearly marked waste stations across the institution • **Color Coding System:** standardized bin colors for different waste types	

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		• **Monitoring Mechanism:** simple tracking of waste quantities and recycling rates • **Recycling Flow:** description of where and how waste is processed or reused • **Awareness Strategy:** posters, digital campaigns, or training sessions **Learning Outcomes** By completing this activity, VET trainers will be able to: • Apply industry waste management practices in an educational setting • Translate market and sustainability trends into institutional action • Promote environmental responsibility within VET institutions • Design practical systems aligned with EU green transition policies **Output**	

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		• A **visual diagram or lay-out plan** of the waste-separation system • A short **implementation proposal document** • Group presentation explaining design choices and sustainability impact **Caption (optional):** *Designing a small-scale institutional waste-separation system as a practical application of circular economy principles in VET environments.*	
Digital simulation		**Digital Simulation: Life Cycle of a Container** **Activity Description:** This activity introduces a **digital simulation of the life cycle of a container**, focusing on how materials move through production, consumption, collection, recycling, and reuse systems. It helps VET trainers understand **circular economy principles** and interpret how industry and market trends influence product life cycles in the waste and recycling sector.	

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		Simulation Overview: Participants will follow the complete journey of a container (plastic, glass, or metal) through its life cycle: 1. **Raw Material Extraction** o Collection of natural resources (oil, sand, minerals) 2. **Production & Manufacturing** o Transformation into containers (bottles, packaging, cans) 3. **Distribution & Consumption** o Transport to markets, use by consumers and industries 4. **Waste Collection** o Disposal into waste systems (households, institutions, businesses) 5. **Sorting & Recycling** o Separation of materials in recycling	

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		facilities 6. **Reprocessing & Reuse** o Conversion into new raw materials or new products **Learning Objectives** • Understand the full **life cycle of materials in a circular economy** • Identify environmental and economic impacts at each stage • Connect industry practices with sustainability and EU policy frameworks • Interpret how market trends influence recycling and production systems • Develop systems thinking in VET teaching practice **Instruction for Participants** • Follow the digital simulation step-by-step • Make decisions at each stage (e.g., recycle, reuse, dispose) • Observe how each decision impacts environmental outcomes	

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		• Reflect on how this model applies to real industry systems in Kosovo, Albania, and the EU **Expected Output** • A completed **life cycle flow diagram of the container** • Short reflection report on sustainability implications • Group discussion on how to integrate this simulation into VET teaching **Caption (optional)** *Interactive digital simulation of a container life cycle illustrating circular economy processes and sustainability decision-making in VET contexts.*	
Digital awareness	Videos, infographics	**Digital Awareness: Creation of Digital Awareness Campaigns (Videos, Infographics)** **Activity Description:** This activity focuses on developing **digital awareness campaigns** to promote understanding of waste management, recycling practices, and circular economy principles within VET institutions and local	

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		communities. VET trainers will design and produce short **videos and infographics** that communicate key messages related to sustainability, industry trends, and environmental responsibility. The activity supports the integration of **digital skills and green competencies**, enabling trainers to translate complex industry and market trends into accessible and engaging learning materials. It also strengthens communication skills and promotes active engagement with learners and stakeholders. **Instructions** Participants will: • Identify a key topic related to waste, recycling, or circular economy (e.g., plastic reduction, e-waste, sorting systems) • Develop a **digital awareness message** targeting students, staff, or local community • Create:	

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		○ A short educational video (1–3 minutes) OR ○ An infographic explaining the topic visually • Use digital tools such as Canva, PowerPoint, CapCut, or similar platforms • Ensure content is clear, visually engaging, and aligned with EU sustainability goals **Learning Objectives** • Develop digital content creation skills (video and infographic design) • Strengthen awareness of environmental sustainability and circular economy • Translate industry and market trends into public communication materials • Promote behavioural change in waste management practices	

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		• Enhance VET trainers' digital pedagogy competencies **Expected Output** • One **digital awareness video or infographic per group** • Short presentation explaining the message and target audience • Reflection on how digital tools can support VET teaching and community engagement **Caption (optional):** *Designing digital awareness campaigns to promote sustainability, recycling practices, and circular economy principles in VET environments and local communities.*	
Hackathon	Hackathon	**Mini Hackathon: "Innovating Waste & Recycling Solutions for VET Institutions"** **Activity Description:** This mini hackathon is a short, intensive, collaborative innovation challenge where VET trainers work in teams to design **practical solu-**	

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		tions for improving waste management and recycling systems within VET institutions. The activity encourages participants to apply **industry and market trend analysis, digital tools, and sustainability principles** in a creative and competitive environment. The hackathon simulates real-world problem-solving situations in the waste and recycling sector, supporting the development of **innovation, teamwork, and digital competencies** aligned with EU green transition goals. **Instructions** Participants will: • Work in multidisciplinary teams • Identify a real or simulated challenge in waste management (e.g., low recycling rates, lack of awareness, inefficient sorting systems) • Develop an innovative solution using: o Digital tools (apps,	

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		dashboards, AI concepts, or simple digital prototypes) o Circular economy principles o Market and industry trend insights • Prepare a **short pitch presentation (3–5 minutes)** • Present their solution to a jury (trainers, peers, or industry representatives) **Hackathon Phases** 1. **Problem Identification** – Analyze waste-related challenges in VET institutions 2. **Idea Generation** – Brainstorm innovative and sustainable solutions 3. **Prototype Design** – Develop a simple model, concept, or digital tool 4. **Pitch Presentation** – Present solution and expected impact **Learning Objectives**	

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		• Apply industry and market trend analysis in problem-solving • Develop innovation and entrepreneurial thinking • Strengthen digital and green competencies • Enhance teamwork and communication skills • Link VET training with real-world sustainability challenges **Expected Output** • Team innovation proposal (concept note or prototype) • Short pitch presentation • Reflection on feasibility and impact in VET context **Caption (optional):** *Mini hackathon activity promoting innovation, collaboration, and sustainable problem-solving in waste management and recycling systems within VET institutions.*	

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6. Methodology

5.1. Project-Based Learning (PBL) and collaborative Learning	This unit will apply Project-Based Learning (PBL) as a core methodology where VET trainers work on real-world sustainability and recycling challenges linked to industry and market trends. Participants will be engaged in designing practical solutions such as waste management models, curriculum adaptations, or training modules aligned with green and digital transition goals. Collaborative learning will be integrated within project teams, encouraging peer-to-peer interaction, shared problem-solving, and collective reflection. This approach ensures that learning is active, contextual, and directly connected to real sector needs in Kosovo, Albania, and the EU framework.
5.2. Collaborative learning between institutions in Albania and Kosovo	This methodology promotes structured cooperation between VET institutions in Kosovo and Albania through joint learning activities, shared assignments, and cross-border training sessions. Trainers will work in mixed institutional groups to compare practices, exchange experiences, and co-develop learning materials related to interpreting industry trends. This approach strengthens regional cooperation, harmonizes VET practices, and supports alignment with EU standards. It also enhances intercultural communication and institutional networking, contributing to long-term capacity building in both education systems.
5.3. Blended Learning	Blended learning will combine face-to-face instruction with online learning environments to provide flexibility and accessibility for VET trainers. The in-person sessions will focus on interactive workshops, discussions, and practical exercises, while online components will include lectures, readings, and collaborative tasks. This dual approach ensures continuous learning beyond classroom boundaries and allows participants to engage with content at their own pace. It also

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	supports the integration of digital tools in VET training, reflecting current EU priorities for digital transformation in education.
5.4. Online and mobile Learning tools	Digital platforms and mobile applications will be used to support learning anytime and anywhere. Tools such as learning management systems (LMS), video conferencing platforms, interactive quizzes, and mobile-based learning apps will facilitate access to resources and communication among participants. These tools enable real-time collaboration, knowledge sharing, and feedback exchange. They also help VET trainers become more digitally competent and familiar with innovative teaching technologies that can be applied in their own institutions.
5.5. Real case studies	The unit will incorporate real case studies from the waste management and recycling sector in Kosovo, Albania, and EU countries. These cases will illustrate how industry and market trends influence vocational education and training. Participants will analyze real challenges such as circular economy implementation, recycling system efficiency, and workforce skill gaps. This methodology bridges theory and practice, enabling trainers to critically evaluate real-world situations and apply learned concepts to improve curriculum design and teaching strategies.
5.6. Visits to companies in the sector	Study visits to companies in the waste management, recycling, and environmental services sectors will provide participants with direct exposure to industry practices. Trainers will observe operational processes, technological innovations, and sustainability strategies used by companies. These visits will strengthen the link between VET education and labor market needs, helping participants understand how industry trends influence skill requirements. Such experiential learning also supports stronger cooperation between education providers and private sector stakeholders.

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5.7. Workshops and experiential learning	Interactive workshops will be organized to promote experiential learning through hands-on activities, group discussions, simulations, and problem-solving tasks. Participants will actively engage in designing training modules, analyzing market data, and developing teaching strategies related to green and digital transitions. This methodology emphasizes learning by doing, allowing trainers to immediately apply theoretical knowledge in practical scenarios. It also encourages creativity, innovation, and reflective practice in VET delivery.
5.8. Community based and participatory approaches	This approach involves engaging local communities, stakeholders, and relevant institutions in the learning process. VET trainers will explore how waste and recycling practices affect communities and how education can contribute to sustainable behavior change. Participatory methods such as stakeholder consultations, community mapping, and group dialogue will be used. This ensures that training is socially relevant, inclusive, and aligned with real community needs, while also strengthening the social impact of vocational education in the region.

7. Resources

Introduction

This unit focuses on strengthening the professional competences of Vocational Education and Training (VET) trainers in Kosovo and Albania within the broader European Union (EU) framework, with particular emphasis on interpreting industry and market trends related to waste management and recycling practices. It supports the dual transition—green and digital—by equipping trainers with the knowledge and tools needed to align vocational education with evolving labour market demands and sustainability goals.

The unit responds to the increasing need for VET systems to integrate environmental sustainability principles, circular economy models, and real-time labour market intelligence into teaching and training practices. By comparing EU best practices with those in Kosovo and Albania, participants will develop a deeper understanding of how policy frameworks, industry developments, and technological innovations influence skills demand in the waste and recycling sector.

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Through a combination of collaborative learning, case studies, digital tools, and practical analysis of market trends, VET trainers will be enabled to modernize curricula and improve the relevance of vocational education. The unit also promotes transnational cooperation, encouraging knowledge exchange and capacity building between institutions in the Western Balkans and EU member states.
Ultimately, this unit aims to empower VET trainers to become active agents of change who can interpret industry developments, anticipate future skills needs, and contribute to more sustainable and responsive vocational education systems.

Resources

The successful implementation of this unit relies on a diverse set of educational, policy, digital, and industry-based resources that support both theoretical understanding and practical application.

Resources Table – Erasmus+ WARP Project Unit

Resources	Type	Use in the Unit	Source
European Green Deal	Policy Document	Provides strategic framework for green transition and sustainability in VET training content	European Commission
Circular Economy Action Plan (EU)	Policy Document	Supports understanding of waste reduction, recycling systems, and sustainable industry practices	European Commission
Skills Agenda for Europe	EU Strategy	Guides development of future-oriented skills for VET trainers	European Commission
ESCO Framework	Skills Classification System	Used to align training content with EU-recognised skills and occupations	European Commission
National Waste Management Strategies (Kosovo & Albania)	National Policy	Contextualises local waste management systems and sector needs	Ministries of Environment / Government Institutions
VET Development Strategies (Kosovo & Albania)	Policy Document	Supports curriculum alignment and training modernization	Ministries of Education
Eurostat Waste Statistics	Industry Data	Provides quantitative data on waste production, recycling rates,	Eurostat

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		and trends	
European Environment Agency (EEA) Reports	Industry Report	Used to analyse environmental performance and circular economy trends	EEA
OECD Skills Outlook Reports	Research Report	Supports labour market trend analysis and future skills forecasting	OECD
World Bank Environmental Reports	Development Report	Provides regional insights into sustainability and workforce transformation	World Bank
Academic Journals on VET and Sustainability	Research Literature	Supports theoretical and empirical understanding of VET and green skills	Universities / Academic Databases
Erasmus+ Project Case Studies	Project Documentation	Provides examples of best practices and successful implementation models	Erasmus+ Platform
Moodle / LMS Platforms	Digital Tool	Used for blended learning delivery and content management	Educational Institutions
Microsoft Teams / Google Classroom	Collaboration Tool	Supports communication, teamwork, and online learning activities	Tech Providers
EPALE Platform	EU Learning Platform	Enables knowledge exchange among VET educators in Europe	European Commission
Industry Reports (Waste Management Companies)	Industry Source	Provides real-life operational data and market trends	Private Sector Companies
Recycling Plant Reports	Technical Documentation	Used for understanding practical recycling processes and technologies	Industry Operators

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Chamber of Commerce Reports	Economic Data	Supports understanding of labour market demand and sector needs	National/Regional Chambers
Webinars on Green Skills	Training Resource	Enhances trainer capacity in sustainability and digital transformation	EU Projects / Training Providers
Open Educational Resources (OER)	Educational Material	Supports free access to learning materials and course development	UNESCO / EU OER Platforms

8. Assessment criteria

8.1. Use of digital tools *(sample for possible tools to be used)*

Assessment criteria:

- The participant effectively uses digital platforms (e.g., LMS, Microsoft Teams, Google Classroom) for learning and collaboration.
- Demonstrates ability to use data analysis tools (e.g., Excel, dashboards) to interpret industry and market trends.
- Actively engages in online discussions, forums, and collaborative tasks.
- Uses digital tools to collect, organize, and present information related to waste and recycling practices.
- Shows digital literacy in accessing, evaluating, and applying online VET and sustainability resources.

8.2. Understanding the sustainability framework

Assessment criteria:

- Demonstrates clear understanding of EU sustainability policies (Green Deal, Circular Economy Action Plan).
- Accurately explains the relationship between waste management, recycling systems, and sustainable development goals (SDGs).
- Identifies key sustainability challenges in Kosovo, Albania, and EU VET contexts.
- Interprets industry and labour market trends in relation to green and digital transitions.
- Applies sustainability principles when analyzing vocational education and training content.

8.3. Ability to implement real improvements

Assessment criteria:

- Proposes realistic and applicable improvements for VET institutions related to waste management and recycling.

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- Demonstrates ability to translate market and industry trends into actionable training or institutional changes.
- Shows innovation in designing practical solutions for sustainability challenges.
- Integrates stakeholder needs (industry, learners, community) into proposed improvements.
- Provides evidence-based justification for proposed changes.

8.4. Final Product: waste management plan for your VET institution

Assessment criteria:

- The plan is structured, clear, and aligned with EU and national sustainability frameworks.
- Includes practical measures for waste reduction, separation, recycling, and monitoring systems.
- Demonstrates integration of industry best practices and market trends.
- Shows feasibility and applicability within a real VET institutional context.
- Includes measurable indicators for evaluation and continuous improvement.
- Reflects interdisciplinary knowledge (environmental, educational, and managerial aspects).

8.5. Self- and co-assessment

Assessment criteria:

- Actively participates in self-reflection on learning progress and skill development.
- Provides honest and structured evaluation of own strengths and areas for improvement.
- Engages constructively in peer feedback and co-assessment activities.
- Demonstrates ability to reflect on group collaboration and contribution to team tasks.
- Uses feedback to improve final outputs and professional practice in VET training.

9. Inclusion of the EU/transnational perspective

The inclusion of the EU and transnational perspective in this unit is essential for ensuring that VET trainers in Kosovo and Albania develop competencies aligned with European standards while responding to local labour market realities and environmental challenges.

- **Comparison of Practices: EU vs. Kosovo and Albania**

In the **European Union**, waste management and recycling practices are strongly regulated through integrated policy frameworks such as the *European Green Deal* and the *Circular Economy Action Plan*. These frameworks promote high recycling rates, advanced

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waste separation systems, digital monitoring of waste flows, and strong cooperation between industry, education, and local authorities. VET systems in EU countries are closely linked to labour market intelligence systems, ensuring that training programmes are continuously updated based on real-time industry data and sustainability goals.

In **Kosovo and Albania**, waste management systems are still developing and often face challenges such as limited infrastructure, lower recycling rates, and weaker enforcement of environmental regulations. However, both countries are increasingly aligning their national strategies with EU environmental and VET policies, particularly through EU-funded projects and reform initiatives. VET systems in these countries are also evolving, but stronger integration with industry data, digital tools, and sustainability frameworks is still needed.

- **Adaptation of European Standards to Local Contexts**

The adaptation of European standards to Kosovo and Albania requires a gradual and context-sensitive approach. While EU practices provide a high-level benchmark, direct transfer is not always possible due to differences in infrastructure, institutional capacity, and market maturity. Therefore, the unit promotes a **localized adaptation model**, where EU best practices are adjusted to:

- Existing waste management infrastructure and capabilities
- Local labour market demands and skill shortages
- Institutional readiness of VET providers
- Availability of digital tools and resources
- Socio-economic and environmental conditions

Transnational Learning and Mutual Benefits

Through transnational cooperation between Kosovo, Albania, and EU partners, this unit encourages:

- **Knowledge transfer** from EU institutions to Western Balkan VET systems
- **Capacity building** for VET trainers in modern sustainability and digital skills
- **Benchmarking of practices**, allowing comparison of performance and identification of gaps
- **Joint development of training modules** aligned with EU green and digital transition priorities
- **Mutual learning**, where EU partners also gain insights from local innovation and adaptability in resource-constrained environments

Conclusion

The EU/transnational perspective ensures that VET trainers are not only aware of European sustainability standards but are also

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capable of critically adapting and implementing them in Kosovo and Albania. This approach strengthens regional integration, supports alignment with EU accession processes, and enhances the overall quality and relevance of vocational education in the field of waste management and recycling practices.

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Module 16 – Entrepreneurship and Innovation

1. Overview of the Unit

1.1. Unit Information

Unit Title	Entrepreneurship and Innovation
This unit is part of…	Stand-alone course EQF Level 5
Prerequisites (if any)	None
Number of modules	Module 1: *Entrepreneurship* Module 2: *Innovation, Sustainability & Growth*

1.2. Justification and Objectives of the Teaching Unit

Today's labor markets — particularly in transition economies — demand individuals who can not only respond to change, but also create, adapt, and transform economic opportunities. The combined forces of digitalisation, globalisation, and the green transition are fundamentally reshaping how small and medium-sized enterprises (SMEs) operate. In Albania and Kosovo, where MSMEs represent more than 98% of all registered businesses, the capacity of the workforce to think and act entrepreneurially is not merely desirable — it is a structural necessity. This is the core rationale for Module 1: Entrepreneurship.

This Entrepreneurship module is designed to bridge the gap between traditional VET delivery — which has historically focused on occupational skills training — and the evolving competence demands of an innovation-driven economy. Drawing on the EntreComp Framework (EU, 2019), the Business Model Canvas (Osterwalder & Pigneur, 2010), and Lean Startup methodology (Ries, 2011), learners are equipped with both the cognitive tools and practical skills to identify opportunities, design value-creating ventures, and operate sustainably within the EU regulatory and policy landscape.

Primary objectives of this unit:

- Develop learners' entrepreneurial identity and self-efficacy through structured reflective practice
- Equip learners with market analysis and business model design skills applicable to the Western Balkans SME context
- Embed sustainability, digital competence, and EU regulatory literacy as cross-cutting dimensions of the Entrepreneurship module
- Prepare learners to access EU entrepreneurship support instruments (Erasmus+, COSME, Horizon Europe)

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• Foster collaborative, cross-institutional learning between Albanian and Kosovar VET communities

1.3. Contextualisation of the Issue in Albania and Kosovo

Both Albania and Kosovo are characterised by a dominant MSME sector (over 98% of registered businesses), high levels of informality, necessity-driven entrepreneurship, and persistent gaps in digital and green skills. Innovation rates remain well below EU averages, constrained by limited R&D investment, weak technology transfer mechanisms, and an underdeveloped start-up ecosystem.
At the regional level, SMEs face the following systemic barriers:
• Weak integration into EU value chains and limited export diversification
• Low levels of formalisation, reducing access to finance and institutional support
• Skills mismatches between VET graduates and private sector demand
• Insufficient adoption of digital and green technologies relative to EU competitors
• Limited awareness of EU funding instruments (Erasmus+, COSME, Horizon Europe, IPA III)
The WARP Project responds directly to these challenges by developing VET curricula that are competence-based, regionally contextualised, and aligned with EU standards — including the European Qualifications Framework (EQF), the EntreComp Framework, and the DigComp 2.2 framework. This unit provides the entrepreneurship and innovation literacy that VET graduates in both countries urgently need to participate meaningfully in the modern economy.

1.4. Expected Results in Terms of Teaching Practices

The Entrepreneurship module is designed to shift VET teaching practice from knowledge transmission toward experiential, competence-based pedagogy. Expected outcomes go beyond content acquisition — they target durable changes in how educators design and facilitate entrepreneurship learning. Expected results include:
• Educators adopting project-based and challenge-based learning (PBL/CBL) approaches in entrepreneurship education
• Increased confidence and proficiency in the use of digital collaboration tools (Miro, Mural, Canva) in classroom activities
• Stronger industry linkages through real-world case studies, guest speakers, and field visits to local SMEs
• Systematic integration of peer learning, self-assessment, and reflection into routine VET delivery
• Facilitators acting as coaches and learning guides rather than knowledge transmitters
• Cross-institutional collaboration between Albanian and Kosovar VET institutions through shared projects and digital workspaces

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1.5. Connection with the Objectives of the WARP Project

This module is directly aligned with the core objectives of the WARP Project, contributing across all its strategic dimensions:

Modernisation of VET curricula:
Integrating entrepreneurship, sustainability, and digital competences into mainstream VET pathways, replacing outdated content-only delivery with competence-based design.

Regional cooperation:
Fostering shared learning frameworks, cross-institutional peer feedback activities, and joint asynchronous innovation sprints between Albanian and Kosovar VET institutions.

European integration:
Aligning learning outcomes with EQF Level 5, EntreComp, DigComp 2.2, and the European Green Deal — preparing learners for EU market participation.

Employability and entrepreneurship:
Developing practical venture creation skills, market analysis competence, and pitch communication — directly increasing labour market readiness of VET graduates.

Sustainability education:
Embedding SDG alignment, circular economy thinking, and ESG awareness throughout both modules — consistent with the EU Green Deal and Agenda 2030.

Digital transformation:
Integrating free-to-access digital tools into core pedagogical activities, building DigComp-aligned skills as a natural extension of entrepreneurship learning.

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2. Key Competences to Be Developed

2.1. Ecological Competencies

Description of the competence	*Eco-Innovation and Sustainable Business Design* *Learners develop the ability to integrate sustainability principles — including the UN Sustainable Development Goals (SDGs), circular economy thinking, and ESG (Environmental, Social, Governance) criteria — into the design and evaluation of business models. They explore eco-innovation as both a market opportunity and a regulatory compliance imperative under the European Green Deal. The competence is grounded in recognising that sustainability is not a constraint on entrepreneurship but a driver of competitive advantage, particularly for SMEs seeking access to EU markets and green finance instruments.*
Description of the Learning Outcomes related to this competence	• Define eco-innovation and distinguish it from conventional product/process innovation, using real examples from the Western Balkans • Apply circular economy principles (reduce, reuse, remanufacture, recycle) to identify waste-reduction opportunities in SME operations • Design a business model that integrates at least two relevant SDGs as explicit strategic drivers (e.g. SDG 8 + SDG 12) • Evaluate the environmental viability of a business concept against Albanian and Kosovar regulatory frameworks and relevant EU frameworks • Identify at least one EU green financing instrument relevant to a chosen business model (e.g. Green Deal funding, EIB loans, IPA III environment streams)
Description of the evaluation criteria	• Inclusion of sustainability elements (SDGs, ESG criteria) in the Business Model Canvas group project — assessed via project rubric • Quality of eco-innovation analysis in the MVP validation report — assessed for depth, specificity, and EU relevance • Peer and facilitator scoring on the pitch presentation against a green business rubric (provided in Assessment Appendix)

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2.2. Digital Competencies

Description of the competence	*Digital Entrepreneurship and Innovation Tools* Learners acquire practical fluency with digital tools used in modern entrepreneurial practice — from collaborative design platforms to market validation and communication tools. This competence aligns explicitly with the DigComp 2.2 framework (EU, 2022) across five areas: Information and Data Literacy, Communication and Collaboration, Digital Content Creation, Safety, and Problem-solving. It supports the digitalisation pillar of the EU Twin Transition and equips learners to operate in hybrid and remote work environments.
Description of the Learning Outcomes related to this competence	• Use digital collaboration platforms (Miro, Mural, Canva) to co-create and iteratively refine Business Model Canvases in team settings • Apply digital tools for market research, customer discovery, and structured data collection (Google Forms, survey tools) • Record, self-assess, and improve a business pitch using video tools and structured peer feedback rubrics • Navigate EU digital funding and support portals (Erasmus+, Horizon Europe, COSME, Digital Europe Programme) • Critically evaluate the credibility, relevance, and limitations of digital data sources used in market analysis • Create a professional digital pitch deck using Canva or equivalent, aligned with investor presentation standards
Description of the evaluation criteria	• Demonstrated use of at least two digital tools in the group project deliverable (tracked via submission metadata and/or platform activity logs) • Quality and effectiveness of the recorded pitch presentation — assessed against the

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	Pitch Evaluation Rubric • Engagement in digital collaboration (reflected in Miro board activity, peer comments, and version history) • Ability to correctly locate and reference at least one relevant EU digital funding instrument in the ecosystem mapping activity

2.3. Pedagogical Competencies (Transferable/EntreComp-aligned)

Description of the competence	*Entrepreneurial Mindset and Self-Directed Learning* *Beyond content knowledge, learners develop metacognitive and transferable competences: resilience, creative problem-solving, collaborative leadership, and ethical reasoning. These align with the EntreComp Framework areas of 'Ideas and Opportunities', 'Resources', and 'Into Action' (EU, 2019). This competence acknowledges that entrepreneurship is fundamentally a way of thinking and acting — a mindset that can be cultivated across all occupational contexts, not only in business creation.*
Description of the Learning Outcomes related to this competence	• Apply structured problem-solving methodologies (Design Thinking, NABC (Need, Approach, Benefit, Competition) method, Lean experimentation) to open-ended challenges • Work effectively in diverse teams, navigating ambiguity, disagreement, and resource constraints constructively • Critically evaluate their own venture assumptions and articulate lessons learned from 'failure events' or unexpected customer feedback • Take initiative in self-directed learning — proactively seeking information, seeking feedback, and applying new insights • Practise ethical decision-making in business contexts, including intellectual property respect, fair competition, and stakeholder consideration
Description of the evaluation criteria	

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	• Peer evaluation of collaborative contribution using the Team Contribution Rubric (structured self and peer scoring form) • Facilitator observation of problem-solving behaviour during asynchronous workshop and project activities (observation checklist provided) • Quality and specificity of the 'Lessons Learned' section in the final MVP Validation Report

3. Learning Outcomes

By the end of this course, learners should be able to:

	Knowledge	**Skills**	**Competences**
LO1	Analyse different forms of entrepreneurship (necessity-driven, opportunity-driven, social, and intrapreneurial), interpret key entrepreneurial competences using EntreComp, and appraise market conditions using SWOT and PESTLE analysis. Identify key entrepreneurial competences using EntreComp Apply basic market analysis tools (SWOT, PESTLE)	Execute environmental scanning (SWOT, PESTLE, market validation interviews) to detect market inefficiencies and customer pain points in the Albanian and Kosovar SME context.	Demonstrate initiative, resilience, and reflective self-management, treating setbacks as learning opportunities within an iterative venture discovery process.
LO2	Understand the 9 building blocks of the Business Model Canvas, with emphasis on Value Proposition–Customer Segment fit, and explain how	Construct and test a Minimum Viable Product (MVP) using the Build–Measure–Learn feedback loop; design customer journeys and value propositions for identified target segments	Critically evaluate the economic, social, and environmental viability of a venture concept against local regulatory frameworks (Albanian/Kosovar) and EU sustainability standards.

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	SDGs and ESG criteria can be embedded as strategic drivers in business model design.	using digital tools (Miro, Canva, Strategyzer).	
LO3	Define eco-innovation and circular economy principles in SME competitiveness; map local and regional entrepreneurial ecosystems including incubators, accelerators, VET partnerships, and EU funding instruments (Erasmus+, Horizon Europe, COSME, Digital Europe Programme, IPA III).	Develop and deliver a structured business pitch using the NABC (Need, Approach, Benefit, Competition) methodology (Need, Approach, Benefit, Competition); record, self-assess, and iterate on presentation quality through structured peer feedback.	Advocate for social and sustainable entrepreneurship models that prioritise stakeholder value and environmental preservation; collaborate effectively in cross-institutional innovation teams under conditions of uncertainty and resource constraint.
LO4	Explain the fundamentals of intellectual property law (trademarks, patents, copyright) within Albanian and Kosovar legal frameworks and in the context of EU-wide IP protections and the unitary patent system.	Apply basic IP analysis to a business concept to identify protectable elements; evaluate whether a business model risks infringing third-party IP rights.	Integrate ethical reasoning and IP awareness into venture design decisions, demonstrating understanding of fair competition principles and responsible innovation.
LO5	Identify the key EU policy frameworks relevant to entrepreneurship and innovation — including the SME Strategy for a Sustainable and Digital Europe, the European Green Deal, the Digital Decade Policy Programme, and the Western Balkans Economic and Investment Plan.	Compare EU entrepreneurship support mechanisms with available national and regional instruments in Albania and Kosovo; identify the most relevant funding pathway for a given venture concept.	Position their venture within the European regulatory and policy landscape; demonstrate readiness to access EU market opportunities and cross-border collaboration networks.

4. Teaching Contents of the Unit

MODULE 1: Entrepreneurship

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Module number & title	Content type	Content development	Notes
	UNIT 1: Entrepreneurship Foundations — Mindset, Self-Efficacy & EntreComp Framework		
1.1	Core Narrative Text Block (Reading / Text Content)	*WHAT IS AN ENTREPRENEUR?* This unit reframes entrepreneurship from a career option into a transferable competence set. Drawing on the EntreComp Framework (European Commission, 2019), learners explore three competence areas: (1) Ideas and Opportunities, (2) Resources, and (3) Into Action. The unit challenges the dominant 'job-seeker' identity prevalent in post-transition economies like Albania and Kosovo, and replaces it with an 'opportunity-creator' identity — applicable whether the learner goes on to start a business, work inside an existing SME, or contribute to social change in their community. *ENTREPRENEURSHIP AS A SPECTRUM* Entrepreneurship is not binary. It exists on a spectrum from: • Intrapreneurship — applying entrepreneurial thinking within an existing organisation • Social entrepreneurship — creating ventures that address social or environmental challenges with a financially sustainable model • Necessity entrepreneurship — starting a business out of economic need	Suggested format: Single-column reading block with pull-quote highlighting the Dweck (2006) quote. Include a sidebar with the EntreComp wheel visual.  This narrative should be broken into 3–4 scrollable sections in

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		(common in Albania/Kosovo) • Opportunity entrepreneurship — starting a business to exploit a market gap identified through research In the Western Balkans context, the dominant form of entrepreneurship has historically been necessity-driven — triggered by unemployment or under-employment rather than a desire to innovate. This course challenges learners to develop the skills and confidence to move toward opportunity-driven entrepreneurship, supported by analytical tools and EU policy frameworks. *WHY DOES MINDSET MATTER?* Research in psychology (Bandura, 1977; Dweck, 2006) consistently shows that self-efficacy — belief in one's own ability to accomplish tasks — is a stronger predictor of entrepreneurial behaviour than intelligence, social background, or access to capital. This section introduces: • Growth vs. Fixed Mindset (Dweck, 2006): The belief that abilities can be developed through dedication and hard work, rather than being fixed traits. • Entrepreneurial Self-Efficacy (ESE): A learner's belief in their capacity to successfully execute entrepreneurial tasks — from ideation to pitching to managing failure. • Failure tolerance: In high-performing entrepreneurial cultures (Silicon Valley, Tel Aviv, Tallinn), failure is treated as learning data. In post-socialist cultures, failure often carries stigma. This course explicitly addresses failure as a pedagogically valid event. Reflection prompt (feeds into Journal Entry 1): "Think of a time you tried something and it did not go as planned. What did	the LMS with progress tracking.

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		you learn? How would you approach it differently today? Would you call that a failure — or an experiment?	
1.2	Interactive Infographic / Accordion Content EntreComp Framework Deep Dive	*THE ENTRECOMP FRAMEWORK — 15 COMPETENCES ACROSS 3 AREAS* The EntreComp Framework (European Commission, 2019) defines entrepreneurship as a transversal competence — applicable across all life domains, not only business. It identifies 15 competences across three areas: *AREA 1: IDEAS AND OPPORTUNITIES* 1. Spotting opportunities — Identifying possibilities for creating value by observing the social, cultural, and economic environment VET Example: A learner from Shkodër notices that local tourist restaurants waste 40% of their produce. This is an opportunity for a food redistribution social enterprise. 2. Creativity — Developing creative ideas and turning them into action through imaginative and lateral thinking VET Example: Redesigning the packaging for a traditional Kosovar artisan product to enable export to EU markets. 3. Vision — Imagining and describing a desired future state and working toward it VET Example: Articulating a 5-year vision for a local SME to become the first carbon-neutral food producer in the region. 4. Valuing ideas — Making judgements about the value of personal, social, and economic ideas VET Example: Using a structured Value Proposition Canvas to test whether an idea actually solves a real customer problem.	Format: Accordion with 3 tabs (one per EntreComp area). Each tab contains a numbered list of competences with definitions, VET examples, and self-rating prompts. Interactive self-rating slider (1–5) for each competence.  Image: entrecomp_wheel.jpg (EU Commission, open-use license)

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		5. Ethical and sustainable thinking — Assessing the consequences of ideas and entrepreneurial decisions on the community, society, and natural environment VET Example: Evaluating a business plan against the SDGs to ensure positive social and environmental impact. *AREA 2: RESOURCES* 6. Self-awareness and self-efficacy — Believing in your own ability to act and influence outcomes VET Example: Completing the EntreComp self-rating exercise and creating a personal development plan. 7. Motivation and perseverance — Staying focused and committed when things get difficult VET Example: Iterating on a business pitch three times based on feedback, rather than abandoning the idea after the first rejection. 8. Mobilising resources — Identifying, attracting, and using human, financial, physical, and digital resources VET Example: Accessing free digital tools (Miro, Canva, Google Workspace) and EU micro-grant programmes for early-stage ventures. 9. Financial and economic literacy — Understanding basic economic and financial concepts for entrepreneurial decisions VET Example: Calculating a break-even point for a proposed café business using a simple spreadsheet model. 10. Mobilising others — Inspiring and engaging people to support a project or venture	

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		VET Example: Building a founding team with complementary skills — technical, marketing, and management. AREA 3: *INTO ACTION* 11. Taking initiative — Acting on opportunities without waiting for permission VET Example: Running 5 customer discovery interviews before the facilitator sets them as homework. 12. Planning and management — Setting goals, designing action plans, and managing resources effectively VET Example: Using a project Gantt chart to plan the development of an MVP prototype over 4 weeks. 13. Coping with uncertainty, ambiguity, and risk — Acting decisively despite incomplete information VET Example: Launching an MVP despite uncertainty — treating market feedback as the required information. 14. Working with others — Collaborating effectively in diverse teams VET Example: Managing a cross-cultural project team with members from both Albania and Kosovo. 15. Learning through experience — Extracting lessons from experimentation, both successes and failures VET Example: Writing a structured 'lessons learned' reflection after a failed customer interview. SELF-ASSESSMENT ACTIVITY:	

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		Rate yourself 1–5 on each of the 15 competences. Identify your top 3 strengths and 2 priority development areas. Record these in your Reflective Journal (Entry 1). You will revisit this self-assessment at the end of Module 2 to track your growth.	
1.3	Growth Mindset & Entrepreneurial Self-Efficacy (Short Animated Video + Reflection Prompt)	GROWTH MINDSET IN THE ENTREPRENEURIAL CONTEXT 'The way we think about our own abilities fundamentally shapes what we are willing to attempt.' — Carol Dweck, Mindset (2006) FIXED vs. GROWTH MINDSET — KEY DISTINCTIONS: Fixed Mindset | Growth Mindset "I'm not creative — I'm not a business person" | "Entrepreneurial skills can be learned and developed" Avoids challenges to protect self-image | Seeks challenges as opportunities to grow Gives up after early setbacks | Persists; treats setbacks as data Sees peer success as threatening | Learns from peers' approaches and achievements Believes talent is fixed | Believes effort and strategy drive improvement IN THE WESTERN BALKANS CONTEXT: Post-socialist educational cultures have historically emphasised conformity, rote learning, and deference to authority — all associated with fixed-mindset thinking. VET learners in Albania and Kosovo may carry beliefs such as: • "Business is for people with connections (lidhje) — not for me" • "Starting a business is too risky — I need a secure job" • "Innovation happens in rich countries, not here"	Format: Short animated micro-lecture (3–4 minutes) narrated by facilitator or voice-over, accompanied by comparison table. Local case study co-created with WARP Albanian/Kosovar partners. Subtitles in Albanian/English.

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		This unit explicitly challenges these beliefs through evidence-based cases of successful Albanian and Kosovar entrepreneurs who started with limited resources but high self-efficacy and a growth orientation. LOCAL CASE STUDY — 'FROM NECESSITY TO INNOVATION': Brief profile of a real or fictionalised Albanian/Kosovar VET graduate who identified a local market gap and built a sustainable micro-enterprise — starting with free digital tools and a €200 initial investment. Reflection prompt (Journal Entry 2): "Which fixed-mindset beliefs have you held about entrepreneurship? What evidence from this unit challenges those beliefs? Choose one of the 15 EntreComp competences you rated yourself lowest on. Write a 'growth plan' — three specific actions you will take this module to develop it."	
	UNIT 2: Venture Creation — Business Model Canvas & Value Proposition Design		
2.1	Core Narrative Text Block What is a Business Model? (Reading / Text Content — Column 1 of 3)	*WHAT IS A BUSINESS MODEL — AND WHY DOES IT MATTER?* A business model is not a business plan. Where a plan is a static document written once for a bank or investor, a model is a living hypothesis — a set of assumptions about how value is created, delivered, and captured. The Business Model Canvas (Osterwalder & Pigneur, 2010) provides nine building blocks that map these assumptions visually on a single page. The nine building blocks are: 1. Customer Segments — Who are we creating value for? Who are our most	 Format: Single-column scrollable read-

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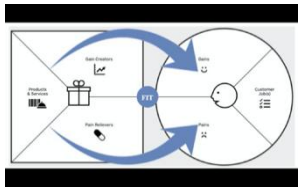
		important customers? (B2C, B2B, niche, mass market, multi-sided platforms) 2. Value Propositions — What value do we deliver to the customer? Which customer problems are we solving? What bundles of products and services are we offering? 3. Channels — How do we reach our Customer Segments to deliver our Value Proposition? (Direct/indirect, owned/partner channels, digital/physical) 4. Customer Relationships — What type of relationship does each Customer Segment expect us to establish? How costly are they? (Self-service, automated, personal, community) 5. Revenue Streams — For what value are our customers really willing to pay? How do they currently pay? How would they prefer to pay? (Asset sales, subscription, licensing, advertising, transaction fees) 6. Key Resources — What Key Resources do our Value Propositions require? (Physical, intellectual, human, financial) 7. Key Activities — What Key Activities do our Value Propositions require? (Production, problem-solving, platform/network management) 8. Key Partnerships — Who are our Key Partners and Suppliers? What Key Resources are we acquiring from partners? What Key Activities do partners perform? (Optimisation & economy of scale, reduction of risk, acquisition of resources) 9. Cost Structure — What are the most important costs inherent in our business model? (Cost-driven vs. value-driven; fixed vs. variable costs) THE BMC AS A HYPOTHESIS TOOL: The most important insight about the BMC is that every block represents an assumption — not a fact. The purpose of the canvas is not to document what you already know, but to make visible what you assume — and then to go test those assumptions with real customers.	ing. Include an annotated BMC diagram (bmc_labelled_diagram.jpg) alongside or below the text. Consider adding a callout box: 'The BMC was designed to replace the 40-page business plan. In 2010, it was revolutionary. Today it is the standard starting point for every start-up in the world.'

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		This is the core philosophical shift between traditional business planning (where you write what you think is true) and Lean Startup/BMC methodology (where you identify what you need to test). COMMON ERRORS VET LEARNERS MAKE WITH THE BMC: • Writing only one Customer Segment (most businesses serve multiple) • Confusing Value Proposition with the product feature list • Listing revenue streams without any price logic • Leaving Key Partners blank (almost all SMEs depend on at least some external partners) • Treating the cost structure as a budget rather than a logic model NOTE FOR THE WESTERN BALKANS CONTEXT: In markets like Albania and Kosovo, Channel strategy is particularly critical. Informal distribution networks, social media (Instagram, WhatsApp Business), and market days may be more relevant channels than e-commerce or formal retail — particularly for rural producers.	
2.2	Value Proposition Canvas (Column 2 of 3 — Interactive)	VALUE PROPOSITION DESIGN — ZOOMING IN The Value Proposition Canvas (Osterwalder et al., 2014) zooms into two of the nine BMC blocks: the Customer Profile and the Value Map. THE CUSTOMER PROFILE has three components: • Customer Jobs — What tasks is the customer trying to accomplish? What problems are they trying to solve? What needs are they trying to satisfy? (Functional, social, emotional jobs) Example: A small restaurant owner in Pristina needs to reduce food waste costs while also attracting eco-conscious younger diners. • Customer Pains — What annoys the customer before, during, and after	Format: Interactive split-screen exercise. Left panel: Customer Profile blank template (jobs/pains/gains). Right panel: Value Map template (products/pain relievers/gain creators). Drag-and-drop or free-text fields.

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		completing a job? What risks do they fear? Example: Difficulty finding reliable, traceable suppliers. Fear of EU hygiene compliance fines. • Customer Gains — What outcomes and benefits does the customer want? What would delight them? Example: A simple digital traceability certificate that proves to customers exactly where their food came from. THE VALUE MAP has three components: • Products & Services — What products and services does the Value Proposition consist of? • Pain Relievers — How do your products and services alleviate customer pains? • Gain Creators — How do your products and services create customer gains? PRODUCT-MARKET FIT (PMF) is achieved when there is strong alignment between the Customer Profile and the Value Map — when your pain relievers address the most critical pains, and your gain creators deliver the most desired gains. CRITICAL INSIGHT: Most failed start-ups built something nobody wanted — not because the idea was bad, but because the founders never truly understood their customer's jobs, pains, and gains before building. The Value Proposition Canvas forces this discipline. APPLIED EXERCISE — 'CUSTOMER EMPATHY MAP': Working in pairs, choose one of the following customer personas (or create your own based on a real person in your community):	Auto-save to learner portfolio.  Image: value_prop_canvas_template.jpg. Reference: Osterwalder et al. (2014) Value Proposition Design.

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		• Persona A: A 35-year-old textile factory supervisor in Korçë, Albania, worried about automation and job security • Persona B: A 28-year-old IT freelancer in Pristina, Kosovo, struggling to find consistent clients and manage irregular income • Persona C: A 55-year-old farmer in rural Kosovo wanting to sell direct to urban consumers Complete the Customer Profile (jobs/pains/gains) for your chosen persona. Then design a Value Proposition that achieves product-market fit. Share with another pair for feedback. This exercise prepares learners directly for the Group Business Model Project (Assessment 1).	
2.3	Digital Tools for Business Design (Column 3 of 3 — Practical Tools Tutorial)	*DIGITAL TOOLS FOR BUSINESS MODEL DESIGN* In modern entrepreneurship practice, business model design is a collaborative, iterative, and digital process. This section introduces three free-to-access tools that learners will use throughout the course: TOOL 1: MIRO (miro.com) What it is: A free collaborative digital whiteboard platform used by start-ups and global corporations alike. How we use it: Teams create a shared Miro board with a Business Model Canvas template. Each team member can add sticky notes in real time — even from different locations (e.g. Albania and Kosovo). This supports the cross-institutional collaboration objectives of the WARP Project. Getting started: Register at miro.com (free tier supports up to 3 boards). Access the BMC template from the template library. Share the board link with your team.	Format: Tutorial-style content with step-by-step tool guides. Include embedded screenshots or screen-recording clips for Miro and Canva sign-up and template access.

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		VET Tip: Miro works on smartphones. Learners without laptops can participate fully via the mobile app. TOOL 2: CANVA (canva.com) What it is: A free graphic design platform with professional templates for pitch decks, business model presentations, infographics, and social media. How we use it: Teams use Canva to create their final pitch deck (5–8 slides) and visual business model presentation for Assessment 1. Getting started: Register at canva.com. Search for 'Business Model Canvas' or 'Pitch Deck' templates. Canva Education (free for students) unlocks premium features with a school email address. Key templates for this course: Business Model Canvas, Lean Canvas, Pitch Deck, SWOT Analysis poster, SDG alignment infographic. TOOL 3: STRATEGYZER (strategyzer.com) What it is: The official digital tool developed by the creators of the Business Model Canvas. The free tier allows unlimited BMC creation and export. How we use it: Optional supplementary tool — learners can use Strategyzer to create a clean, exportable version of their BMC for inclusion in the portfolio submission. APPLIED GROUP TASK: SME PIVOT CASE STUDY Context: The COVID-19 pandemic (2020–2022) forced thousands of Albanian and Kosovar SMEs to pivot their business models rapidly. Many that survived did so by rethinking their channels (moving online), their customer relationships (shifting from transactional to community-based), and their value propositions (adding safety, convenience, or local sourcing as key features). Task: In groups of 3–4, use Miro to complete a Business Model Canvas for	

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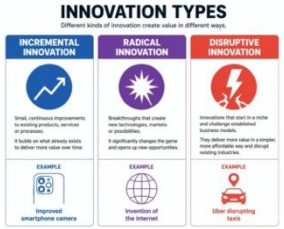
		ONE of the following scenarios: A) A Tirana-based restaurant that survived COVID by launching a meal-kit delivery subscription service B) A Kosovo craft beer producer that added an online shop and direct-to-consumer shipping channel C) A Shkodër tour guide service that pivoted to virtual cultural tours on Zoom for diaspora communities Deliverable: A completed Miro BMC board + a 5-minute verbal presentation explaining the pivot logic. Submit the Miro board link via the LMS assignment submission portal. Assessment link: This task is the formative preparation for Assessment 1 (Group Business Model Project).	
2.4	Formative Assessment: Business Model Hypothesis Card (Individual Pre-Project Task)	*BUSINESS MODEL HYPOTHESIS CARD* Before your team begins the Group Business Model Project, each individual learner completes a solo 'Business Model Hypothesis Card' — a structured one-page template that forces you to articulate your initial assumptions about a business idea you find interesting. This is NOT a final business plan. It is a set of starting hypotheses that your team will test, challenge, and iterate as you work through the project. *THE HYPOTHESIS CARD TEMPLATE:* □ Business idea (1 sentence): _____ □ Target customer (be specific — not "everyone"):	Format: Downloadable PDF template + LMS submission form. This activity bridges Unit 2 and Assessment 1, ensuring all learners enter the group project with a tested personal perspective.

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		_____ □ Core value proposition (what problem does this solve?): _____ □ One key assumption about the customer: _____ □ One key assumption about the revenue model: _____ □ Which EntreComp competences am I drawing on in this idea?: _____ □ Which SDG does this idea connect to?: _____ □ My biggest uncertainty about this idea: _____ *JOURNAL ENTRY 3 PROMPT:* After completing the hypothesis card, write a 200–300 word journal reflection: "What do I know for certain about this idea? What am I assuming without evidence? How would I test my most important assumption in the next 7 days with zero budget?" *PURPOSE OF THIS ACTIVITY:* This exercise trains the 'validated learning' habit central to Lean Startup methodology. Before building anything, learners practice making their assumptions explicit — the first step toward testing them with real customers. *FACILITATOR NOTE:* Collect hypothesis cards before the first group session. Use them to form balanced project teams — mixing learners with complementary ideas and	

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		strengths. Alternatively, ask each learner to pitch their idea in 60 seconds before teams self-select based on shared enthusiasm.	
MODULE 2: Innovation, Sustainability, and Growth			
Item #	Content Type / Sub-Unit	Content Development (Full Text / Instructions)	Notes for Instructional Designer
	UNIT 2.1: Innovation Taxonomies — Types of Innovation and Eco-Innovation		
2.1.1	Core Narrative Text Block Innovation Taxonomies (Reading / Text Content)	*WHAT IS INNOVATION — AND WHAT TYPES EXIST?* Innovation is not invention. Invention creates something new. Innovation creates value from something new. An innovation only counts when it is successfully adopted by users or customers and creates measurable improvement in economic, social, or environmental outcomes. This unit introduces four innovation typologies, all critical for VET learners in the Western Balkans context: *TYPE 1: INCREMENTAL INNOVATION* Definition: Small, continuous improvements to existing products, services, or processes — without fundamentally changing the underlying model. Scale of disruption: Low–Medium Risk level: Low Time to market: Short Western Balkans examples: • A Tirana bakery improving its delivery route to reduce fuel costs by 20% • A Kosovo IT firm adding a live chat feature to its existing customer portal	Format: Long-form reading with four clearly delineated sections.  Include the 'Innovation Comparison Table' as a visual alongside the text: columns = Type, Definition, Risk, Timeline, WB Example. Embed HBR Disruptive Innovation video (Clayton Christensen)

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		• A Shkodër textile producer improving thread quality to meet EU export standards When is incremental innovation NOT enough? When the market has fundamentally changed (e.g. digitalisation), incremental improvements to an outdated model may delay necessary transformation. VET graduates need to recognise when a business needs to PIVOT rather than IMPROVE. *TYPE 2: RADICAL INNOVATION* Definition: Fundamentally new products or technologies that create entirely new markets or replace existing ones. Scale of disruption: High Risk level: High Time to market: Long Western Balkans examples: • Introduction of the first mobile banking app in Kosovo (replacing cash-based transactions) • Launch of first 3D-printed construction components for affordable housing in Albania • Creation of an AI-powered olive oil quality testing platform replacing manual laboratory analysis *TYPE 3: DISRUPTIVE INNOVATION (Christensen, 1997)* Definition: Starts in overlooked or low-end market segments that established players ignore. Over time, improves enough to overturn industry incumbents. Key mechanism: Lower cost + 'good enough' performance → gradual market	after Type 3 description. Link: https://hbr.org/video/2226808799001/disruptive-innovation-explained Reference: Christensen, C. (1997). The Innovator's Dilemma.

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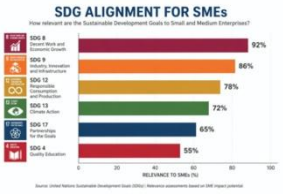
		conquest Scale of disruption: Very High (long term) Risk level: Medium initially, very high for incumbents Video link: https://hbr.org/video/2226808799001/disruptive-innovation-explained Global examples: Netflix vs Blockbuster; Airbnb vs hotels; Wise vs traditional banks Western Balkans application: Mobile-based micro-lending platforms challenging traditional Albanian banks that exclude informal SMEs from credit access. CRITICAL POINT FOR VET LEARNERS: Disruptive innovation often starts with a product or service that experts dismiss as 'not good enough'. The insight of Christensen's model is that incumbents are rational to ignore early-stage disruptors — until it is too late. VET graduates in Albania and Kosovo can BE those disruptors in sectors that established EU companies overlook. *TYPE 4: ECO-INNOVATION* Definition: Innovation that reduces environmental impact, increases resource efficiency, or contributes to a more circular economy — and also creates business value. Regulatory driver: EU Green Deal, EU Taxonomy for Sustainable Activities, CSRD (Corporate Sustainability Reporting Directive) Market driver: Growing consumer demand for sustainable products; EU market access requirements	

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		Western Balkans examples: • A Kosovo logistics start-up replacing diesel delivery vans with electric cargo bikes (last-mile delivery) • An Albanian packaging company switching from plastic to plant-based materials to meet EU export requirements • A rural Kosovar agri-food cooperative designing a zero-waste supply chain for EU specialty food markets KEY INSIGHT — ECO-INNOVATION IS ALSO GOOD BUSINESS: Research by the EU EcoInnovation Observatory shows that eco-innovating SMEs grow faster, attract better talent, and access preferential financing. In Albania and Kosovo specifically, eco-innovation offers a pathway to EU market integration — as EU buyers increasingly require sustainability credentials from their supply chain partners.	
2.1.2	Discussion Forum + Reflective Prompt (Formative Activity)	*DISCUSSION FORUM: 'WHICH TYPE OF INNOVATION DOES YOUR COMMUNITY NEED?*' Forum question (post 1 response + reply to 2 peers): "Think of a specific business, industry, or public service in your town, city, or region (Albania or Kosovo). 1. Which type of innovation — incremental, radical, disruptive, or eco-innovation — would have the greatest positive impact on this sector over the next 10 years? 2. What is the main barrier to this innovation happening? (Skills gap? Capital? Regulation? Culture?) 3. Could a young VET graduate realistically lead this innovation — and if so, how?	Format: LMS discussion board — set up as a moderated forum. Students from Albania and Kosovo should be grouped together across institutions where possible to enable genuine cross-regional dialogue.

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		Post a 150–200 word response and reply constructively to at least two class-mates from a different institution or region." JOURNAL ENTRY 4 PROMPT: "After reading about the four innovation types, revisit your Business Model Hypothesis Card from Unit 2.4 of Module 1. Which type of innovation best describes your idea? Is your idea ambitious enough — or could it be more disruptive? What would a more disruptive version of your idea look like?" ASSESSMENT LINK: This forum post is formatively assessed — the facilitator provides written feedback within 72 hours. The reflective journal entry feeds into the holistic journal review.	
	UNIT 2.2: SDGs as Business Drivers — Sustainability Strategy for SMEs		
2.2.1	Core Narrative Text Block SDGs and SME Strat-egy (Reading / Text Con-tent + Chart)	THE *UN SUSTAINABLE DEVELOPMENT GOALS — FROM GLOBAL FRAMEWORK TO LOCAL BUSINESS STRATEGY* The 17 Sustainable Development Goals (SDGs), adopted by the United Na-tions in 2015 as part of Agenda 2030, provide a universal framework for ad-dressing the world's most pressing social, economic, and environmental challenges. For entrepreneurs, the SDGs are not just an ethical reference point — they are a strategic business tool. WHY DO SDGs MATTER FOR WESTERN BALKANS SMEs? Three reasons make SDG alignment increasingly non-negotiable for SMEs in	Format: Long-form reading with SDG icons/colours where possible (open-use UN assets). 

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		Albania and Kosovo: 1. EU MARKET ACCESS: EU buyers, particularly in Germany, Austria, France, and Scandinavia, are increasingly demanding SDG-aligned sustainability credentials from their Western Balkans supply chain partners. Companies without them face exclusion from procurement processes. 2. EU FUNDING ELIGIBILITY: EU grant programmes (Horizon Europe, COSME, IPA III environment streams) now explicitly require applicants to demonstrate how their project contributes to specific SDGs. Ventures that cannot make this link miss out on funding. 3. CONSUMER PREFERENCE: Research by Deloitte (2023) and Edelman Trust Barometer (2024) confirms that younger consumers (18–35) — the primary customer segment for many VET graduate entrepreneurs — are willing to pay a premium for brands with verified sustainability commitments. *THE MOST RELEVANT SDGs FOR VET LEARNERS IN THE WESTERN BALKANS:* SDG 8 — Decent Work and Economic Growth "Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" Business application: Most directly relevant to all VET learners. A business that creates local jobs, pays fair wages, and invests in staff training is contributing to SDG 8. This is the baseline expectation for any responsible SME. Albanian/Kosovar relevance: Youth unemployment in Kosovo stands at ~25% (2024). Any venture that creates even 3–5 formal jobs contributes meaningfully to SDG 8.	Include horizontal bar chart: 'SDG Relevance for Western Balkans SMEs' (SDG 8 = highest, SDG 17 = 5th). Students should identify which SDG their own venture supports — this can feed into the SDG section of Assessment 1 (Group Business Model Project).

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		SDG 9 — Industry, Innovation, and Infrastructure "Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation" Business application: Directly supports the innovation-focused content of this module. Ventures that introduce digital tools, improve supply chain efficiency, or develop new technologies contribute to SDG 9. SDG 12 — Responsible Consumption and Production "Ensure sustainable consumption and production patterns" Business application: The foundation of circular economy business design. Ventures that reduce waste, use sustainable materials, or enable product take-back and repair programmes directly advance SDG 12. EU relevance: The EU Circular Economy Action Plan (2020) creates regulatory pressure on all businesses — including those in the Western Balkans that want to export to the EU — to align with SDG 12. SDG 13 — Climate Action "Take urgent action to combat climate change and its impacts" Business application: Increasingly required for EU market access. Companies must be able to demonstrate their carbon footprint and reduction trajectory. SMEs with net-zero or carbon-neutral commitments gain competitive advantage. SDG 17 — Partnerships for the Goals "Strengthen the means of implementation and revitalise the global partnership for sustainable development" Business application: Critical for ecosystem-based ventures and cross-border collaborations. VET-to-VET partnerships (e.g. Albania–Kosovo), SME cluster membership, and EU-funded consortium projects all contribute to SDG	

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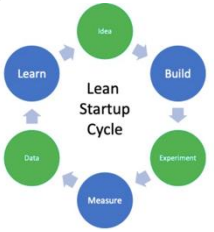
		17. HOW TO EMBED SDGs IN A BUSINESS MODEL: Step 1: Identify which SDG(s) your venture most naturally contributes to. Step 2: Quantify the contribution — not just "we support SDG 8" but "our venture will create 5 formal jobs in a rural area with 30% unemployment". Step 3: Make the SDG alignment visible — in the Value Proposition Canvas, in your pitch deck, and in any EU funding application. Step 4: Avoid 'SDG-washing' — claiming SDG alignment without evidence. EU regulators and informed buyers can spot this and it damages credibility.	
2.2.2	Individual Activity: SDG Business Model Alignment Map (Self-Paced — Links to Assessment 1)	SDG ALIGNMENT MAPPING EXERCISE (INDIVIDUAL) PURPOSE: This self-paced activity bridges SDG theory and business model application, preparing learners for the SDG alignment section of their Group Business Model Project. INSTRUCTIONS: 1. Download the SDG Impact Matrix template from the Resources section. 2. Review your current Business Model Hypothesis Card (from Unit 2.4). 3. Select the 2–3 SDGs most relevant to your venture idea. 4. For each selected SDG, complete one row of the matrix: — Which SDG target does your business address? — How does your Value Proposition contribute to this target? — What measurable indicator could track your impact? 5. Write a 100-word SDG Impact Statement summarising your findings. This statement will form a required deliverable in Assessment 1.	Format: Down-loadable template (PDF) + LMS text sub-mission. SDG Impact Matrix template provided in Section 7 (Re-sources). Feeds directly into the Assessment 1 Group Project deliv-erable.

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		Submit your completed SDG Impact Matrix and statement via the LMS before proceeding to Unit 2.3.	
	UNIT 2.3: Lean Startup Methodology — Build–Measure–Learn and MVP Design		
2.3.1	Core Narrative Text Block The Lean Startup Model (Reading / Text Content + Visual)	THE LEAN STARTUP METHODOLOGY — TESTING YOUR WAY TO SUCCESS The Lean Startup (Ries, 2011) is the most influential methodology in modern entrepreneurship education. It replaces the traditional logic of 'plan → build → launch' with a radically different approach: 'hypothesise → test → learn → iterate'. *THE BUILD–MEASURE–LEARN FEEDBACK LOOP:* Stage 1 — BUILD: Convert your most critical business hypothesis into a Minimum Viable Product (MVP) — the simplest, cheapest version of your idea that allows you to test whether your hypothesis is correct. The MVP is NOT a finished product. It is a test. Stage 2 — MEASURE: Expose your MVP to real customers (not your friends, family, or classmates). Collect data — both quantitative (numbers: how many clicked, signed up, paid) and qualitative (stories: what did they say, what confused them, what delighted them). Stage 3 — LEARN: Analyse the data. Did your hypothesis hold? If yes — PERSEVERE on this direction. If no — you have two options: PIVOT (change a fundamental element of your model) or STOP (the market has told you this idea does not create sufficient value).	Format: Reading block with embedded loop diagram  (lean_startup_loop.jpg — circular diagram: BUILD → MEASURE → LEARN → BUILD). Include 'Pivot vs. Persevere' decision framework as a visual flowchart.

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		THE PIVOT — THE MOST MISUNDERSTOOD CONCEPT IN LEAN STARTUP: A pivot is not failure. It is a strategic, data-driven course correction. Famous pivots: • Instagram pivoted from a location-based check-in app (Burbn) to a photo-sharing platform • YouTube pivoted from a video dating site to a general video platform • Slack pivoted from a video game company (Glitch) to a workplace communication tool The lesson for VET learners: Your first hypothesis is almost certainly wrong. That is not a problem — it is the nature of innovation. The skill is to discover you are wrong quickly and cheaply, before investing significant time or money. MINIMUM VIABLE PRODUCT — TYPES AND EXAMPLES: MVP Type 1: The Landing Page MVP Description: Build a simple web page describing your product and a sign-up button. If people sign up before the product exists, you have validated demand. VET Example: A Kosovo learner tests demand for a local food delivery service by building a one-page Canva website with a WhatsApp order button — before building any delivery infrastructure. MVP Type 2: The Concierge MVP Description: You personally deliver the service manually, without any technology, to your first 5–10 customers. This lets you understand the customer experience deeply before automating it.	Embed Eric Ries keynote video (Lean Startup Conference, 18 min) as pre-class flipped learning assignment. 

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		VET Example: A learner tests a tutoring marketplace idea by manually matching 10 tutors with 10 students via WhatsApp — proving the concept before building any platform. MVP Type 3: The Wizard of Oz MVP Description: From the customer's perspective, the product appears to work automatically. Behind the scenes, humans are doing the work manually. VET Example: A 'smart' home energy monitoring service that appears to be automated, but initially involves a human manually reading smart meters and sending reports. MVP Type 4: The Paper Prototype MVP Description: A low-fidelity physical simulation of a digital product, built from paper and sticky notes. Used for user interface testing. VET Example: A VET learner builds a paper prototype of a mobile app interface and tests it with 5 people by acting as the 'human computer' — clicking buttons on behalf of the tester. THE 5 CUSTOMER DISCOVERY QUESTIONS: Before building any MVP, interview at least 5 potential customers. Ask: 1. 'Tell me about the last time you experienced [the problem you are solving].' 2. 'How do you currently solve this problem?' 3. 'What do you like most and least about your current solution?' 4. 'If a solution like [your idea] existed, what would make you try it?' 5. 'Who else do you know who faces this problem regularly?' Note: Do NOT describe your solution in the interview. Let customers describe the problem first.	

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2.3.3	Worked Example: Completed Business Model Canvas Green Logistics Start-up (Kosovo)	WORKED EXAMPLE — COMPLETED BUSINESS MODEL CANVAS: 'EkoShpërnda' — Kosovo Last-Mile Electric Delivery Start-up This worked example shows a completed, annotated Business Model Canvas for a fictional Kosovo-based last-mile delivery start-up using electric cargo bikes. All 9 blocks are filled in, with sustainability elements highlighted. CUSTOMER SEGMENTS: • Primary: Independent restaurants and cafés in Pristina's Dragodan and Arbëria neighbourhoods • Secondary: Local artisan producers and farmers' market vendors requiring reliable same-day delivery • Tertiary: Urban consumers subscribing to weekly local food boxes VALUE PROPOSITIONS: • Same-day, zero-emission last-mile delivery — the only carbon-neutral courier service in Pristina • Traceability dashboard — restaurants receive real-time delivery tracking + carbon footprint certificate per delivery • 15% lower delivery cost vs diesel couriers (lower fuel and maintenance costs of electric bikes) CHANNELS: • WhatsApp Business API (primary booking channel — used by 94% of Pristina restaurant owners) • Instagram (@ekoshpernda) for brand building and consumer-facing marketing • Direct sales team for B2B restaurant contract onboarding CUSTOMER RELATIONSHIPS:	Format: Full-width worked example.  Image: bmc_green_logistics_example.jpg (full-width annotated). Sustainability highlights in green colour. Use as reference model for group project submission standard. Make available for download as PDF reference card.

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		• Personal account manager for restaurant clients (high-value contracts) • Automated booking confirmations and delivery notifications via WhatsApp REVENUE STREAMS: • Per-delivery fee: €2.50–€4.00 depending on zone and package size • Monthly subscription: €180/month for restaurants sending 3+ deliveries per day (10% discount vs per-delivery rate) • EU Green Deal carbon offset certificate sales (potential additional revenue stream from Year 2) KEY RESOURCES: • Fleet of 8 electric cargo bikes (initial investment: €12,000, funded via EU green SME micro-grant) • Proprietary booking and route optimisation app (outsourced MVP development) • Brand identity and verified sustainability credentials (third-party carbon audit, Year 1) KEY ACTIVITIES: • Route optimisation to maximise deliveries per bike per day • Customer acquisition (restaurant onboarding) • Rider training and safety management • Carbon reporting and EU compliance documentation KEY PARTNERSHIPS: • Municipal government of Pristina (route permits, dedicated bike lanes) • Kosovo Chamber of Commerce (referrals and networking) • EU-funded COSME accelerator programme (access to mentoring and co-financing)	

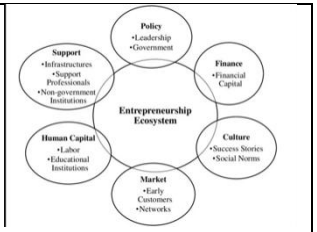
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		• Local renewable energy supplier (green electricity charging contract) COST STRUCTURE: • Fixed: Rider salaries (3 full-time riders, Year 1): €27,000/year • Fixed: App maintenance and hosting: €3,600/year • Variable: Bike maintenance and insurance: ~€1,200/year per bike • Variable: Marketing and customer acquisition: €5,000/year (Year 1) • One-off: Initial bike fleet investment: €12,000 (grant-funded) SUSTAINABILITY ANNOTATION: Green Deal alignment — SDG 11 (Sustainable Cities), SDG 13 (Climate Action), SDG 8 (Decent Work) Carbon footprint per delivery: 0g CO_2e (vs ~120g CO_2e for diesel van equivalent) EU funding accessed: COSME Green Innovation Track — €15,000 seed grant Learner task: Compare this worked example with your own team's BMC. Which blocks are weakest in your model? What does this example suggest about the importance of revenue model granularity and sustainability integration?	
	UNIT 2.4: Entrepreneurial Ecosystems and EU Funding — Mapping Your Support Environment		

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2.4.1	Core Narrative Text Block Entrepreneurial Ecosystems (Reading / Text Content)	*WHAT IS AN ENTREPRENEURIAL ECOSYSTEM?* An entrepreneurial ecosystem is the interconnected community of actors, institutions, and resources that collectively support venture creation and growth in a specific geography. The concept was developed by Isenberg (2010) and has become the dominant analytical framework for understanding why some places (Silicon Valley, Tel Aviv, Tallinn, Berlin) produce far more successful start-ups than others. THE 6 PILLARS OF AN ENTREPRENEURIAL ECOSYSTEM (Isenberg, 2010): 1. POLICY — Government frameworks that support entrepreneurship: Examples: Business registration simplicity, tax incentives for R&D, public procurement open to SMEs, anti-corruption standards. Western Balkans reality: Albania has significantly simplified business registration (24-hour e-registration via QKB portal). Kosovo has introduced the Law on Entrepreneurship and Business Organisations. However, both countries face challenges with informality, regulatory instability, and limited IP enforcement. 2. FINANCE — Access to capital at all venture stages: Examples: Angel investors, venture capital, bank loans (collateralised and uncollateralised), micro-grants, EU structural funds, crowdfunding. Western Balkans reality: Formal venture capital is almost absent. Angel investing is nascent. SME credit remains bank-dominated with high collateral requirements — excluding most informal or early-stage ventures. EU-funded instruments (COSME, IPA III, EIF guarantees) are the primary alternative. 3. CULTURE — Social norms around entrepreneurship, risk, and failure:	 Format: Long-form reading with infographic showing 6 pillars of the ecosystem (hexagonal diagram recommended). Include a 'Western Balkans Ecosystem Snapshot' sidebar with key data points. Reference: Isenberg, D. (2010). How to start an entrepreneurial revolution. Harvard Business Review.

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		Examples: Celebration of entrepreneurial role models, tolerance of failure, immigrant and diaspora entrepreneurship, social trust. Western Balkans reality: Both Albania and Kosovo have large, economically active diaspora communities (Albanian diaspora: ~1.5M; Kosovo Albanian diaspora: ~600,000) that are increasingly becoming angel investors and mentors for home-country ventures. Cultural attitudes to failure are shifting, particularly among younger urban populations. 4. SUPPORTS — Institutional infrastructure for entrepreneurs: Examples: Incubators, accelerators, business development centres, mentoring networks, co-working spaces. Western Balkans examples: • Albania: Startup Albania (Tirana), Business Incubator Shkodër, AIDA (Albanian Investment Development Agency) • Kosovo: Innovation Centre Kosovo (ICK, Pristina), StarTUp Kosovo, Kosovo-EU Business Alliance • Regional: RCC (Regional Cooperation Council), RYCO (Regional Youth Cooperation Office), Western Balkans Enterprise Development & Innovation Facility (WB EDIF) 5. HUMAN CAPITAL — Educated, skilled, and entrepreneurially minded people: Examples: STEM graduates, multilingual workers, VET graduates with entrepreneurial competences, serial entrepreneurs who mentor new entrants. Western Balkans reality: Brain drain remains a significant challenge — particularly in Kosovo where 47% of youth (15–29) expressed intention to emigrate (UNDP, 2022). VET entrepreneurship education plays a direct role in increasing the attractiveness of staying and building locally.	

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		6. MARKETS — Access to customers and commercial opportunities: Examples: Domestic market size, access to EU single market, diaspora as early adopters, public sector procurement. Western Balkans reality: Both Albania and Kosovo have EU integration as their primary foreign policy goal. The EU–Western Balkans Common Regional Market initiative (2020–2024) aims to create a single market of 18 million people as a stepping stone to full EU accession. Entrepreneurs who build EU-compatible, standards-compliant businesses today are positioning themselves for a market of 450 million consumers. *THE WESTERN BALKANS ECOSYSTEM — KEY GAPS AND OPPORTUNITIES:* GAPS: • Virtually no formal venture capital ecosystem • Very limited angel investor network (improving but nascent) • IP system incomplete and enforcement weak • Limited university–industry collaboration on R&D • Low trust in institutions creates barriers to partnership formation OPPORTUNITIES: • EU accession candidacy creates predictable regulatory convergence pathway • Growing diaspora investment and mentoring network • EU funding programmes increasingly accessible (IPA III 2021–2027: €14.2B for Western Balkans) • Digital economy advantages: low labour costs, high English proficiency among youth, growing tech cluster in Pristina and Tirana • Untapped eco-innovation opportunities in agri-food, renewable energy,	

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		and sustainable tourism	
2.4.2	EU Funding Landscape for Entrepreneurs (Reference Guide + Navigation Activity)	*EU FUNDING FOR ENTREPRENEURS — YOUR PATHWAY MAP* One of the highest-value practical skills a VET learner can develop is the ability to navigate EU funding instruments relevant to their venture. EU funding is NOT just for large corporations or universities — many programmes explicitly target SMEs, start-ups, social enterprises, and VET learners. *PROGRAMME 1: COSME (EU Programme for the Competitiveness of SMEs)* Who it is for: SMEs and entrepreneurs in EU member states AND candidate countries (including Albania and Kosovo) What it funds: Easier access to finance (loan guarantees, equity instruments), internationalisation support, access to new markets Key instrument for VET learners: COSME Loan Guarantee Facility — enables SMEs to access loans from partner banks with EU-backed guarantees, removing the collateral barrier How to access: Via national COSME contact points (AIDA in Albania; Ministry of Industry, Trade and Entrepreneurship in Kosovo) Portal: ec.europa.eu/growth/smes/cosme *PROGRAMME 2: ERASMUS FOR YOUNG ENTREPRENEURS* Who it is for: New or aspiring entrepreneurs (0–3 years in business) from EU and partner countries including Western Balkans What it funds: 1–6 month exchange with an experienced entrepreneur in another EU country — providing mentoring, practical learning, and network building Grant value: €1,000–€1,300/month living stipend for the guest entrepreneur VET relevance: VET graduates can apply directly as 'new entrepreneurs'. This	Format: Reference guide with colour-coded programme cards (one per programme).  Include a 'Funding Decision Tree' visual: 'What stage is your venture?' → 'What do you need funding for?' → 'Which programme fits?'. This content should be regularly updated (annually) as EU programme rules change.

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		programme provides access to EU markets and best practices unavailable locally. Portal: erasmus-entrepreneurs.eu *PROGRAMME 3: HORIZON EUROPE — EIC ACCELERATOR* Who it is for: Deep-tech, high-impact start-ups with EU association agreement (Albania, Kosovo are associated to Horizon Europe) What it funds: Grants up to €2.5M + equity investment up to €15M for breakthrough innovations VET relevance: This is a longer-term aspiration for most VET learners, but awareness is essential. VET graduates who develop strong technical innovations can access this pathway via university partnerships or post-incubation. Portal: eic.ec.europa.eu *PROGRAMME 4: IPA III — INSTRUMENT FOR PRE-ACCESSION ASSISTANCE* Who it is for: Public institutions, NGOs, SMEs, and civil society organisations in EU candidate countries (Albania ✓, Kosovo ✓) What it funds: 2021–2027 total: €14.2B for Western Balkans. Priority areas: rule of law, green transition, digital transition, competitiveness, social inclusion Direct SME instrument: IPA III SME competitiveness grants — support green transitions, digital upgrades, and innovation investment How to access: Via national IPA coordination bodies (Department of Development Funding in Albania; MEF Kosovo) *PROGRAMME 5: WESTERN BALKANS ENTERPRISE DEVELOPMENT & INNOVATION FACILITY (WB EDIF)* Who it is for: SMEs in the Western Balkans seeking equity, quasi-equity, and loan financing	

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		What it funds: Equity investments (€100K–€5M), venture loans, guarantee instruments Key partner: European Investment Fund (EIF) Portal: wbedif.eu NAVIGATION ACTIVITY: Using the EU Funding Navigator (ec.europa.eu/regional_policy/en/funding) and the programme portals above, complete the following: 1. Identify ONE EU funding programme most relevant to your team's business model. 2. Find the eligibility criteria — does your team qualify? 3. Identify the application deadline and national contact point. 4. Write a 150-word 'funding pitch' — why should this programme fund YOUR venture? Present your findings to the group in a 3-minute slot during the next synchronous session.	
2.4.3	Ecosystem Mapping Digital Activity (Group Project — Assessment-Linked)	*DIGITAL ECOSYSTEM MAPPING PROJECT* TASK BRIEF: Using Google Maps, Felt.com (free mapping tool), or any geographic information tool, create a digital map of the entrepreneurial ecosystem in your city (Tirana, Pristina, or your local area). This activity develops practical environmental scanning skills and produces a reference resource that your entire cohort can use.	Format: Independent and group digital activity. Provide a tutorial video (5 minutes) on using Felt.com for learners unfamiliar with mapping tools.

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		WHAT TO MAP: Category 1 — Finance (mark in GOLD): • Commercial banks offering SME loans • Microfinance institutions • EU-funded grant programme offices • Angel investor networks (if known) • Crowdfunding-active ventures (local examples) Category 2 — Supports (mark in BLUE): • Business incubators and accelerators • Co-working spaces • Business development centres • National/regional SME development agencies (AIDA Albania / MTI Kosovo) Category 3 — Education (mark in GREEN): • VET schools with entrepreneurship programmes • Universities with business/innovation faculties • Erasmus+ mobility partner institutions Category 4 — Markets (mark in ORANGE): • SME business associations and chambers of commerce • Industry clusters (agri-food, ICT, tourism, crafts) • Export market support organisations • EU trade offices and business councils Category 5 — Culture/Community (mark in RED): • Innovation hubs and maker-spaces • Startup events and pitch competitions (annual calendar)	The comparative Albania/Kosovo task explicitly supports WARP cross-institutional collaboration objectives. Maps should be embedded in the LMS as interactive links.

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		• Social enterprise networks DELIVERABLE: Shareable map link + 1-page summary table (ecosystem gap analysis): • Which ecosystem pillars are STRONGEST in your city? • Which are WEAKEST? • What does this mean for YOUR venture? Where will you find support and where will you face barriers? CROSS-INSTITUTIONAL BONUS TASK: If your class includes learners from both Albania and Kosovo, create a COMPARATIVE map — identifying 3 ecosystem elements that are stronger in Albania and 3 that are stronger in Kosovo. What could each country learn from the other? Assessment link: This activity contributes to the Group Business Model Project portfolio submission.	
	UNIT 2.5: Intellectual Property, Ethics, and Responsible Innovation		
2.5.1	Core Narrative Text Block IP Fundamentals for Entrepreneurs (Reading / Text Content)	*INTELLECTUAL PROPERTY — PROTECTING YOUR INNOVATION* Intellectual property (IP) law enables entrepreneurs to protect their creative work and innovations from being copied without permission or compensation. Understanding IP basics is essential for any entrepreneur — both to protect your own innovations and to avoid unintentionally infringing on others'.	Format: Long-form reading with four IP type cards. Include a 'Free IP Support' callout box: 'You do not need to pay for IP advice. DPPI Albania and IAPK Kosovo

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		TYPE 1: TRADEMARKS What it protects: Brand names, logos, slogans, and distinctive signs that identify the commercial origin of goods or services. Duration: Renewable indefinitely (every 10 years) Albanian framework: Registered at the Albanian General Directorate of Industrial Property (DPPI — dppi.gov.al) Kosovo framework: Registered at the Kosovo Industrial Property Agency (IAPK — ipak.rks-gov.al) EU framework: EU Trade Mark (EUTM) registered at EUIPO (euipo.europa.eu) — one registration covers all 27 EU member states (+ increasingly recognised in Western Balkans under SAAs) VET example: A Kosovo coffee roastery registers its brand name 'Bjeshka' and logo as a trademark — preventing competitors from launching 'Bjeshka Coffee' and free-riding on their reputation. TYPE 2: PATENTS What it protects: New inventions — products or processes that are novel, non-obvious, and have industrial applicability. Duration: 20 years from filing date (subject to annual renewal fees) Threshold: Higher than trademarks — the invention must be genuinely new and non-obvious globally. Cost consideration: Patent filing is expensive (€5,000–€15,000 for EU patent); for most VET-level entrepreneurs, design protection or trademarks are more practical instruments. EU framework: European Patent Office (EPO, epo.org) — a single application can cover multiple European countries. VET example: A team of Albanian VET learners develops a low-cost solar-	offer free initial consultations. EUIPO runs a free IP for SMEs helpdesk.' Reference: EUIPO (2024). IP Management for Start-ups — A Practical Guide.

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		powered irrigation device for smallholder farmers. The device design could be patentable — but they should first seek free IP advice from the DPPI or a local IP clinic before investing in filing. TYPE 3: COPYRIGHT What it protects: Original creative works — written content, music, art, software code, photographs, film — automatically from the moment of creation (no registration needed). Duration: Life of the creator + 70 years VET relevance: Software code written by a VET learner for an app is automatically copyrighted. Website content, marketing copy, and original photography are also protected. IMPORTANT — OPEN SOURCE AND CREATIVE COMMONS: Not all intellectual work is fully protected. Open-source software licences (MIT, GNU GPL, Apache) allow free use and modification under specific conditions. Creative Commons licences allow controlled sharing of creative works. VET learners should understand these frameworks when using third-party content in their ventures. TYPE 4: GEOGRAPHICAL INDICATIONS (GIs) Definition: A GI protects products from a specific place whose qualities or reputation are linked to that origin. Western Balkans opportunity: Albania and Kosovo have significant agri-food products with strong geographical and cultural identity — raki, gjizë, mountain honey, Ohrid trout, Kosovo wine, Vranac grape. GI registration could add significant export value. EU framework: Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI) — administered by the European Commission.	

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		VET relevance: Understanding GIs opens opportunities for agri-food entrepreneurs to position local products as premium in EU markets. ETHICAL AND RESPONSIBLE INNOVATION — BEYOND LEGAL COMPLIANCE Legal compliance is the minimum threshold. Responsible entrepreneurship goes further: ETHICS IN INNOVATION: • Do not build something just because you can — ask whether you should. • Consider who benefits from your innovation and who might be disadvantaged. • Respect user data and privacy — GDPR compliance is mandatory for any business operating in EU or EU-related markets. • Avoid deceptive marketing practices — 'greenwashing', 'SDG-washing', and false advertising damage consumer trust and attract EU regulatory penalties. AI ETHICS FOR ENTREPRENEURS: As AI tools become integrated into SME operations, entrepreneurs must navigate: • Algorithmic bias — AI systems trained on biased data may perpetuate discrimination • Data transparency — customers have the right to know if AI is making decisions about them (EU AI Act, 2024) • Intellectual property in AI-generated content — ownership of AI-generated code, images, and text is legally unsettled THE EU AI ACT (REGULATION 2024/1689): Effective from August 2024, the EU AI Act categorises AI systems by risk level.	

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		VET entrepreneurs using AI tools in their ventures should understand: • What data their AI tools collect and how it is processed • Whether their AI application falls into a regulated risk category • How to demonstrate compliance with EU AI Act transparency requirements	
2.5.3	Final Assessment Preparation Recorded Pitch Briefing (Assessment 2: Individual Recorded Pitch)	RECORDED PITCH BRIEFING — 'WARP INNOVATION PITCH' This is the capstone assessment of Module 2 and the final individual performance assessment of the entire course (Assessment 2: Individual Recorded Pitch — 35%). DELIVERY FORMAT Each learner records a 3-minute pitch video using their device (smartphone, laptop webcam, or screen-recording tool such as Loom, Canva Presentations). The recording is uploaded to the LMS or a shared video platform (e.g. YouTube unlisted / Google Drive). NABC STRUCTURE REQUIRED: N — Need: What problem exists? (data-backed from customer discovery) A — Approach: What is your solution? (linked to your Business Model Canvas) B — Benefit: What value does it create? (quantified, SDG/EU-aligned) C — Competition: What makes you different? (specific differentiators) Closing Call to Action: What do you want from the viewer? PEER EVALUATION: After submitting, each learner watches and evaluates two peers' videos using the published Peer Pitch Evaluation Rubric. Peer evaluations are submitted via the LMS and form part of Assessment 4 (Peer Evaluation, 10%).	Format: LMS video submission + peer review tool. Facilitator evaluates recording asynchronously using the published rubric. Peer evaluations auto-assigned via LMS after submission deadline. Publish assessment rubric at START of Module 2 so learners can self-prepare progressively.

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		SELF-REVIEW: Before final submission, learners watch their own recording once and complete a self-assessment checklist against the NABC rubric. Evidence of self-review should be included in the Reflective Journal (Entry 6).	

5. Activities

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Module number & title	**Activity type**	**Activity development**	**Notes**
Flashcards	Key Concept Flashcard Set (Modules 1 & 2)	Digital flashcard deck covering all core terminology: EntreComp, BMC building blocks, Lean Startup concepts, SDGs, innovation types, IP definitions. Available on Quizlet or embedded in LMS. Flashcard examples: • Front: 'What is a Minimum Viable Product (MVP)?' Back: 'The simplest version of a product/service that allows collection of maximum validated learning about customers with minimum effort. (Ries, 2011)' • Front: [BMC blank image] Back: [BMC with all 9 blocks labelled	LO1, LO2, LO3, LO4 Formative self-study

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		and colour-coded] • Front: 'Name the 3 EntreComp competence areas' Back: (1) Ideas & Opportunities (2) Resources (3) Into Action	
Multiple Choice Quiz	Module 1 & 2 Knowledge Check (Online Quiz)	10-question case-based adaptive quiz assessing applied conceptual knowledge across both modules. Example Q1: "Which of the following BEST describes a Business Model Canvas?" A) A detailed financial plan for bank submission B) A one-page visual map of how a business creates, delivers, and captures value ✓ C) A legally binding partnership agreement D) A government registration document Example Q2 (Multiple Response): "Which of the following are elements of Lean Startup methodology? Select ALL that apply." A) MVP ✓ B) 40-page business plan C) Build–Measure–Learn loop ✓ D) Pivot strategy ✓ E) Annual budget review Feedback: Immediate automated feedback on all answers with explanatory notes and a short case explanation.	LO1, LO2, LO3 Formative auto-graded

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		Example Q1: 'Which of the following BEST describes a Business Model Canvas?' A) A detailed financial plan for bank submission B) A one-page visual map of how a business creates, delivers, and captures value ✓ C) A legally binding partnership agreement D) A government registration document Example Q2 (Multiple Response): 'Which of the following are elements of Lean Startup methodology? Select ALL that apply.' A) MVP ✓ B) 40-page business plan C) Build–Measure–Learn loop ✓ D) Pivot strategy ✓ E) Annual budget review Feedback: Immediate automated feedback on all answers with explanatory notes.	
Matching Activity	Innovation Framework Matching Exercise	Drag-and-drop matching activity: learners match each framework/concept to its originator, date, and core purpose.	LO1, LO2 Formative auto-graded

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		Items to match: • Business Model Canvas → Osterwalder & Pigneur (2010) → Visual mapping of venture hypothesis • Lean Startup → Eric Ries (2011) → Hypothesis-driven iterative development • EntreComp → European Commission (2019) → EU entrepreneurship competence framework • Disruptive Innovation → Clayton Christensen (1997) → Market transformation through low-end/niche entry • Value Proposition Canvas → Osterwalder et al. (2014) → Customer-product fit analysis • SDGs → United Nations (2015) → Global sustainable development goals framework	
Fill in the Blank	Lean Startup & BMC Vocabulary Builder	Sentence completion exercise using a word bank. Word bank: [Pivot / MVP / SDGs / EntreComp / Build-Measure-Learn / Value Proposition / Eco-innovation / Customer Segment /	LO1, LO2, LO3 Formative auto-graded

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		Revenue Stream / Disruptive Innovation] 1. The EU entrepreneurship competence framework is called _____ [EntreComp]. 2. A _____ [MVP] is the simplest testable version of a business idea. 3. When market data suggests a strategy is not working, a Lean Startup entrepreneur should consider a _____ [Pivot]. 4. The iterative loop at the heart of Lean Startup methodology is called _____ [Build-Measure-Learn]. 5. The block in the Business Model Canvas that answers 'Why would anyone buy this?' is the _____ [Value Proposition]. 6. Innovation that reduces environmental impact while creating business value is called _____ [Eco-innovation].	
Discussion Forum	Cross-Institutional Peer Learning Forum (Modules 1 & 2)	Moderated asynchronous discussion forum connecting learners across Albanian and Kosovar VET institutions.	LO1, LO2, LO3, LO5 Formative participation mark

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		Module 1 prompt: 'Which of the 15 EntreComp competences do you feel you need most in the context of starting a business in Albania or Kosovo today? Why? What specific barriers do entrepreneurs in your region face that the EU context does not acknowledge?' Module 2 prompt: 'Find a real Albanian or Kosovar business that has successfully innovated in the past 5 years. Which type of innovation did it apply? What enabled its success and what almost stopped it?' Assessment: Participation assessed formatively — minimum 1 post + 2 peer responses per forum.	
Digital Map Activity	Entrepreneurial Ecosystem Digital Map (Individual Research Activity)	*INDIVIDUAL DIGITAL ECOSYSTEM MAPPING TASK (SELF-PACED)* Using Google Maps, Felt.com (free mapping tool), or any geographic information tool, create	Format: Individual async digital activity. Tool tutorial video (5 min) provided in Resources. LO Link: LO3, LO5; Portfolio component.

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		a personal digital map of the entrepreneurial ecosystem in your city (Tirana, Pristina, or your local area). Map the following 5 categories (minimum 3 entries each): 1. Finance providers (banks, micro-lenders, investors) 2. Business support organisations (incubators, accelerators, business associations) 3. Education & training providers (universities, VET centres, online programmes) 4. Key markets and customers (sectors, export corridors) 5. Culture & community (entrepreneurship events, networks, role models) DELIVERABLE: • A shareable map link (Felt.com or Google My Maps) • A short gap analysis table (what is MISSING from the ecosystem?) • One paragraph reflection: How does this ecosystem help or hinder your venture idea?	

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		Submit your map link and reflection via the LMS.	
Scenario Simulation	NABC Pitch Branched Scenario	Branched digital scenario: learner plays the role of a VET graduate pitching to an investor in a lift (30-second elevator pitch). Decision points test understanding of NABC structure and pitch quality. Slide 1 — Character: 24-year-old VET graduate from Tirana. Background: Idea for a mobile app connecting Albanian farmers directly with urban consumers. Slide 2 — The investor asks: 'What problem does this solve and for whom?' Branching choices: Choice A (weak): 'It helps farmers sell products online.' → Feedback: Too vague — no data, no specific customer, no scale. Choice B (strong): 'In Albania, 30% of fresh produce is wasted before reaching consumers. Our platform connects 200+	LO1, LO3 Formative, links to Assessment 2

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		small farms directly to 5,000 urban households in Tirana, cutting waste by 40% while increasing farmer income by 25%.' → Feedback: Excellent — specific customer, quantified problem, clear benefit. Slide 3 — Debrief: NABC structure explanation. Activity: Record a 60-second personal pitch and submit for peer evaluation.	
Sustainable Design Challenge	Circular Business Model Redesign Challenge	Design challenge: Select a real local SME (or a fictional one) in a resource-intensive sector (food production, textiles, construction, packaging). Redesign its business model using circular economy principles. Guiding questions: 1. Where is waste currently generated in this model? 2. What could be reused, repaired, remanufactured, or recycled? 3. Which SDGs does the redesigned model address?	LO2, LO3 Formative — linked to Assessment 1

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		4. What is the estimated environmental impact of the circular redesign? 5. What would be the business case — does it save money, open new revenue streams, or both? Deliverable: Redesigned BMC (Miro board) + 2-minute pitch explaining the circular transition logic. This activity can be integrated into the Group Business Model Project for teams choosing a sustainability-focused venture.	
Timeline Activity	Evolution of Entrepreneurship Theory Timeline	Interactive timeline: learners place key frameworks and events in chronological order. Key dates and events: • 1979: Porter's Five Forces published • 1985: Drucker's 'Innovation and Entrepreneurship' • 1997: Christensen's 'The Innovator's Dilemma' • 2005: Osterwalder's PhD thesis — precursor to BMC • 2010: Business Model Canvas published (Osterwalder & Pigneur) • 2011: Lean Startup	LO1, LO5 Formative — self-study

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		published (Ries) • 2015: UN SDGs adopted (Agenda 2030) • 2019: EntreComp Framework published (EU) • 2020: EU Green Deal and Circular Economy Action Plan • 2022: DigComp 2.2 published • 2024: EU AI Act enacted Learner task: For each date, answer — 'What changed for entrepreneurs because of this?' One-sentence response per event, then write a short comparison explaining which two developments matter most for Albania and Kosovo today. Key dates and events: • 1979: Porter's Five Forces published • 1985: Drucker's 'Innovation and Entrepreneurship' • 1997: Christensen's 'The Innovator's Dilemma' • 2005: Osterwalder's PhD thesis — precursor to BMC • 2010: Business Model Canvas published (Osterwalder & Pigneur) • 2011: Lean Startup published	

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		(Ries) • 2015: UN SDGs adopted (Agenda 2030) • 2019: EntreComp Framework published (EU) • 2020: EU Green Deal and Circular Economy Action Plan • 2022: DigComp 2.2 published • 2024: EU AI Act enacted Learner task: For each date, answer — 'What changed for entrepreneurs because of this?' One-sentence response per event.	

6. Methodology

6.1. Project-Based Learning (PBL) and Collaborative Learning	Central to this module. Learners work in teams of 3–4 across the full module lifecycle — from ideation and market research through to MVP development and final pitch recording. The Group Business Model Project serves as the primary vehicle for applied learning. Team coordination is fully asynchronous — using shared Miro boards, Google Docs, and LMS group spaces. No synchronous team meetings are required; facilitators support groups via asynchronous written feedback on milestone check-ins.
6.2. Cross-Institutional Collaborative Learning (Albania–Kosovo)	Shared asynchronous digital workspaces (Miro boards, shared LMS discussion forums) connect VET learners from Albania and Kosovo across institutions. Cross-institutional peer feedback on pitch recordings and business model projects is facilitated asynchronously

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	via the LMS. The Digital Ecosystem Map activity explicitly supports comparative Albania–Kosovo analysis without requiring live co-ordination. All cross-institutional activities are designed to function without scheduling synchronous sessions.
6.3. Fully Online Self-Paced Asynchronous Design	The module is delivered entirely online and asynchronously. All content — readings, interactive activities, video resources, flashcards, quizzes, and assessments — is accessible through the LMS at any time. Learners progress through units at their own pace within suggested weekly schedules. There are no mandatory live sessions. Peer learning occurs through asynchronous discussion forums, shared digital deliverables, and LMS peer review tools. Facilitators provide asynchronous feedback within defined turnaround times (72 hours for formative; 10 working days for summative).
6.4. Self-Paced Video and Pre-Reading Design	Video content (Eric Ries Lean Startup keynote, Clayton Christensen HBR video, Strategyzer BMC explainer) is embedded directly in the relevant unit pages of the LMS. Each video is accompanied by a guided viewing prompt and a short self-check reflection question. Learners engage with video content at their own pace before proceeding to interactive exercises in the same unit. This replaces the synchronous flipped classroom model with a fully self-directed equivalent — learners control pacing, rewatching, and reflection.
6.5. Digital and Mobile Learning Tools	Key platforms: Miro/Mural (collaborative BMC design), Canva (pitch decks and visual communication), Google Forms (customer discovery surveys), Quizlet/H5P (flashcards and quizzes), Felt.com (ecosystem mapping), LMS discussion forums (peer learning). All tools are selected based on accessibility, free-tier availability, and mobile compatibility — ensuring learners without laptops can participate fully via smartphones.
6.6. Real-World Case Studies	Each module unit is anchored by a real-world case study drawn

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	from the Western Balkans context — including SMEs that pivoted during COVID-19, local green start-ups, and businesses that successfully accessed EU funding. This grounds abstract theory in recognisable, proximate examples relevant to Albanian and Kosovar learners. Facilitators are encouraged to supplement provided cases with current local examples identified through their own network.
6.7. Curated Video Interviews and Virtual Case Studies	In place of in-person field visits, learners access a curated library of recorded video interviews with local entrepreneurs, incubator managers, and ecosystem actors from Albania and Kosovo. These are embedded in the relevant unit pages of the LMS and accompanied by guided reflection prompts. Where available, recorded webinars from Startup Albania, ICK Pristina, and EU SME support organisations are linked as supplementary resources.
6.8. Experiential and Reflective Learning	Core experiential elements: customer discovery interviews (minimum 5 per team), MVP prototype workshop (Unit 2.3.2), and the final pitch assessment (Assessment 2). Kolb's Experiential Learning Cycle (Experience → Reflection → Conceptualisation → Experimentation) underpins the pedagogical sequence — every theory unit is followed by a practice activity and a reflection prompt.

7. Resources

CORE READING AND FRAMEWORKS

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- Government of Albania. (2008). *Law No. 9947 on Industrial Property* (as amended). Official Gazette.
- Government of Albania. (2016). *Law No. 35/2016 on Copyright and Related Rights*. Official Gazette.

VIDEO RESOURCES

• Harvard Business Review — 'What is Disruptive Innovation?' (Clayton Christensen): https://www.youtube.com/watch?v=qDrMAzCHFUU
— Assigned viewing: Unit 2.1

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• Lean Startup Conference — Eric Ries Keynote (The Lean Startup): https://www.youtube.com/watch?v=fEvKo90qBns
— Assigned viewing: Unit 2.3 (flipped classroom pre-reading)
• EUIPO — 'IP for SMEs — Why Does It Matter?': https://euipo.europa.eu/ohimportal/en/sme-fun — Assigned viewing: Unit 2.5
• Strategyzer — Business Model Canvas explained: https://www.youtube.com/watch?v=QoAOzMTLP5s — Recommended: Module 1 Unit 2
• TED Talk — 'The Puzzle of Motivation' (Dan Pink): https://www.ted.com/talks/dan_pink_the_puzzle_of_motivation — Supplementary: Module 1 Unit 1

DIGITAL TOOLS AND PLATFORMS

• Miro — miro.com: Free collaborative whiteboard — BMC design, ecosystem mapping, workshop facilitation
• Canva — canva.com: Free graphic design platform — pitch decks, BMC presentation, infographics, social media
• Strategyzer — strategyzer.com: Free BMC and Value Proposition Canvas digital builder
• Felt.com — felt.com: Free collaborative mapping tool — ecosystem mapping activity
• Quizlet — quizlet.com: Free digital flashcard and quiz platform — embedded in LMS or accessed directly
• H5P — h5p.org: Free interactive content creation (quizzes, matching, fill-in-the-blank) — embed in LMS
• EU Funding Navigator — ec.europa.eu/regional_policy/en/funding: EU funding programme search and navigation tool
• EUIPO eSearch Plus — euipo.europa.eu/eSearch: EU trademark and design register search — IP audit activity
• Erasmus for Young Entrepreneurs Portal — erasmus-entrepreneurs.eu: Programme portal — Unit 2.4
• COSME Programme Portal — ec.europa.eu/growth/smes/cosme: EU SME programme portal — Unit 2.4
    - Entrecomp: https://entrecompeurope.eu/wp-content/uploads/EntreComp-A-Practical-Guide-English.pdf#:~:text=The%20EntreComp%20wheel%20offers%20an%20overview%20of,to%20help%20you%20think%20about%20the%20entrepreneurial
    - https://www.euipo.europa.eu/en/sme-corner/free-ip-support/how-it-works

TEMPLATES AND PRINTABLE MATERIALS

• Business Model Canvas template (A1 printable) — for MVP Design Workshop: https://www.strategyzer.com/library/the-business-model-canvas

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• Value Proposition Canvas template — for Unit 2.2 exercise: https://www.strategyzer.com/library/the-value-proposition-canvas#:~:text=Tools-,The%20Value%20Proposition%20Canvas,and%20achieve%20Product%2DMarket%20fit.
• EntreComp Self-Assessment Wheel (A3 printable) — for Unit 1.2: https://entrecompeurope.eu/resources/#:~:text=These%20resources%20will%20provide%20useful%20insights%20and%20inspiration%20for%20your%20own%20entrepreneurial%20learning%20journey.
• Business Model Hypothesis Card template — for Unit 2.4 (Module 1): https://www.strategyzer.com/library/validate-your-ideas-with-the-test-card
• Customer Discovery Interview Guide — for MVP testing (Unit 2.3.2)
• NABC Pitch Framework card — for Assessment 2 preparation
• Peer Pitch Evaluation Rubric — for peer assessment of pitch presentations
• Reflective Journal Template — 6 structured entries with guiding prompts
• SDG Impact Matrix template — for Unit 2.2.2 activity: https://sdgs.un.org/sites/default/files/documents/9789CRT046599%2520SDG_Financial%2520Services_29sep_WEB-1.pdf
• IP Audit Checklist — for Unit 2.5.2 workshop
• Team Contribution Peer Evaluation Form — for Assessment 4 (Peer Evaluation)

8. Assessment Criteria

Assessment for this course uses a mixed formative and summative approach, aligned with EQF Level 5 expectations and competence-based VET principles. All assessments are completed online asynchronously — there are no mandatory live or synchronous events.

ASSESSMENT OVERVIEW
Assessment 1: Group Business Model Project: 40% | Summative | Submitted end of Module 2
Assessment 2: Individual Recorded Pitch (NABC): 35% | Summative | Video uploaded to LMS
Assessment 3: Entrepreneurship Module Knowledge Check Quiz (Online): 15% | Auto-graded case-based quiz, end of Module 1
Assessment 4: Peer Evaluation (Team Contribution): 10% | Structured self and peer scoring
TOTAL: 100%

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REFLECTIVE JOURNAL (MANDATORY FORMATIVE PORTFOLIO COMPONENT)
Purpose: Support the development of entrepreneurial mindset, identity, and metacognitive competence across both modules through structured reflection and self-review.
Journal structure: 6 structured entries across both modules. Entry prompts are provided in the teaching content sections.
Word guide: 200–400 words per entry. Quality of thinking is more important than quantity of words.
Submission: The journal is submitted once at the end of the course as a mandatory portfolio component. It is not separately weighted, but completion is required.
Use of the journal: Entries provide evidence of self-assessment, responsiveness to feedback, and development over time. Relevant insights may be referenced within summative assessment feedback.

ASSESSMENT 1: GROUP BUSINESS MODEL PROJECT (40%)
Purpose: Assess application of entrepreneurial knowledge and skills through real venture design (EntreComp Areas 1 and 3).
Deliverables: 1) Completed Business Model Canvas (Miro board link)
2) Value Proposition Canvas
3) SDG Impact Statement (100 words)
4) Customer Discovery Summary (5 interviews — template provided)
5) MVP description and rationale (max 300 words)
6) EU Funding pathway identification (1 relevant programme)
Submission format: LMS portfolio submission (ZIP file or shared folder link) + Miro board link
Group size: 3–4 learners. Cross-institutional groups (Albania + Kosovo mix) are strongly encouraged.

Assessment criteria — LEVEL 5:
Business Model Quality (40%): Coherence of all 9 BMC blocks; internal logic; specificity of Customer Segment and Value Proposition; realism of Revenue Streams.
Sustainability Integration (20%): Quality of SDG alignment; evidence of circular economy thinking; ESG awareness in model design.
Market Validation (20%): Quality and quantity of customer discovery; evidence of iterative model refinement based on feedback.
Team Process and Reflection (20%): Peer evaluation scores; evidence of equitable contribution; integration of facilitator feedback.

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ASSESSMENT 2: INDIVIDUAL RECORDED PITCH — NABC (35%)
Purpose: Assess communication of entrepreneurial ideas, synthesis of course learning, and the ability to structure a compelling, evidence-based pitch aligned with the Business Model Canvas developed in Assessment 1.
Format: 3-minute individual recorded video pitch, submitted via LMS. Followed by asynchronous peer review using the Peer Pitch Evaluation Rubric.
NABC Structure required: N — Need (data-backed), A — Approach (BMC-linked), B — Benefit (SDG/EU aligned, quantified), C — Competition (specific differentiators). Closing Call to Action.
Assessment rubric:
Content Quality (40%): NABC completeness; evidence use; SDG/EU alignment; realism of benefit claims.
Communication Quality (30%): Clarity; confidence; pace; visual aids (slides/screen share).
Q&A Performance (30%): Replaced by depth of peer review responses submitted via LMS.
Preparation: Pitch recorded at least once and self-reviewed before submission. Peer evaluated by two course peers (contributes to Assessment 4).

FEEDBACK POLICY
• Formative feedback on Reflective Journal entries: Facilitator provides written comments within 72 hours where entries are submitted during the module, or holistic feedback at the end of the course where submission is collected as a portfolio.
• Formative feedback on Discussion Forum contributions: Facilitator responds to at least one post per learner per forum topic within 72 hours.
• Summative feedback on Assessments 1 and 2: Written assessment report (using the published rubric) returned within 10 working days of submission. The online quiz provides immediate automated feedback.
• All feedback must be actionable — not just evaluative. Every critical comment should include a specific suggestion for improvement.
• EQF Level 5 expectation: Learners are expected to respond to feedback in subsequent submissions. Evidence of this responsiveness can be demonstrated in the Reflective Journal and in improvements across project work.

9. Inclusion of the EU/Transnational Perspective

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This module explicitly situates VET learners within the European policy landscape and prepares them for participation in the EU single market and its evolving regulatory environment. The EU/transnational dimension is not a 'bolt-on' to this course — it is embedded throughout the curriculum as a practical business reality for any Albanian or Kosovar entrepreneur seeking to grow beyond domestic markets.

KEY EU POLICY FRAMEWORKS REFERENCED THROUGHOUT THE COURSE

SME Strategy for a Sustainable and Digital Europe (2020):
Learners compare EU digitisation vouchers, green subsidies, and start-up support schemes with locally available instruments. Assessment 1 requires identification of one relevant EU funding pathway.

European Green Deal (2019) and Circular Economy Action Plan (2020):
Integrated throughout Module 2 — SDG alignment, eco-innovation, circular business model design, and sustainability reporting requirements all reference the Green Deal as the regulatory driver.

EU AI Act (Regulation 2024/1689):
Introduced in Unit 2.5 — learners develop baseline awareness of AI ethics regulation and its implications for entrepreneurs using AI tools in their ventures.

DigComp 2.2 (2022):
The Digital Competences section (Section 2.2) maps explicitly to DigComp 2.2 competence areas. Digital tools used in the course (Miro, Canva, Google tools) develop DigComp competences practically.

EU–Western Balkans Common Regional Market Initiative (2020–2024):
Module 2 ecosystem mapping activity introduces learners to the regulatory convergence pathway toward EU accession — contextualising all entrepreneurship decisions within the trajectory of EU integration.

EQF Level 5 Standards:
Learning outcomes and assessment criteria are explicitly mapped to EQF Level 5 knowledge, skills, and competence descriptors throughout this document.

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Western Balkans Economic and Investment Plan (2020):
Introduced in Unit 2.4 — learners understand how EU investments in Western Balkans infrastructure, green transition, and digitalisation create entrepreneurial opportunities in the short to medium term.

EntreComp and DigComp Frameworks:
Both frameworks are referenced throughout the curriculum as the EU's definitive competence standards for entrepreneurship and digital literacy — providing a directly transferable credential for learners seeking employment or further study in EU countries.

TRANSNATIONAL LEARNING ACTIVITIES

• Cross-institutional discussion forums — connecting Albanian and Kosovar VET learners in structured asynchronous dialogue on shared entrepreneurial challenges
• Cross-institutional innovation sprint — conducted through shared digital workspaces and asynchronous discussion across at least two VET institutions to simulate cross-border co-creation
• Comparative Ecosystem Map — identifying differences and synergies between Albanian and Kosovar entrepreneurial ecosystems
• EU Funding Navigation Activity — learners from both countries identify and compare the most relevant EU funding pathways for their venture context
• Erasmus for Young Entrepreneurs — programme introduced as an accessible cross-border experiential learning opportunity for post-course participation
• Peer pitch evaluation — ideally conducted across institutions, giving learners experience of presenting to an audience unfamiliar with their local context

PREPARING LEARNERS FOR EU MARKET PARTICIPATION

A central ambition of this course is to equip VET graduates in Albania and Kosovo with the knowledge, skills, and confidence to participate in the EU single market — not merely as employees of EU-linked companies, but as founders and leaders of their own EU-compatible ventures. This means learners leave the course with:

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• Awareness of EU regulatory requirements relevant to their sector (GDPR, Green Deal, AI Act, product standards)
• Knowledge of EU funding programmes they can access at the pre-seed and seed stage (COSME, Erasmus for YE, IPA III)
• A pitch and business model that demonstrates EU standards compliance and sustainability commitment — essential for EU buyer and investor conversations
• A cross-border professional network, initiated through the WARP cross-institutional activities
• A reflective portfolio (journal + project + pitch) that documents their entrepreneurial competence development in EU-recognised terms (EQF Level 5, EntreComp, DigComp)

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9. WARP OERs Sustainability

The WARP Open Educational Resources have been developed with sustainability, reusability and adaptability as key design principles. Their modular structure and open educational approach facilitate their potential reuse and adaptation by vocational education providers, training organisations and other stakeholders beyond the project's implementation period, where appropriate and according to future educational needs.

The educational resources constitute the final output of the WARP capacity-building intervention and provide a comprehensive portfolio of multilingual learning materials supporting the sixteen learning units of the WARP curriculum. Their organisation within the WARP Virtual Learning Space establishes a coherent digital learning environment that can continue to serve as a reference point for vocational education and training in the fields of sustainable waste management, circular economy and green skills.

The adoption of the Creative Commons Attribution–NonCommercial 4.0 International (CC BY-NC 4.0) licence further supports the dissemination, reuse and contextual adaptation of the educational resources by external organisations and educators, in accordance with the licence conditions. This open educational approach contributes to the long-term exploitation potential of the project results by facilitating knowledge sharing and encouraging the broader uptake of the educational materials within the vocational education community.

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10. Conclusions

The WARP Open Educational Resources constitute the educational foundation of the project's capacity-building intervention, providing a comprehensive portfolio of openly accessible learning materials designed to strengthen the competences of Vocational Education and Training educators in the fields of sustainable waste management, environmental sustainability and innovative teaching practices.

Structured around 16 learning units organised into 4 learning pathways, the educational resources support diverse learner profiles while promoting flexible, self-paced and practice-oriented professional development. Their modular organisation, multilingual availability and consistent instructional design contribute to an accessible and coherent learning experience capable of addressing the evolving needs of the vocational education sector.

Developed according to the principles of Open Educational Resources, the WARP OERs extend the impact of the project beyond its implementation period by encouraging reuse, adaptation and dissemination within the wider educational community. Together with the WARP Virtual Learning Space and the broader capacity-building intervention, these educational resources contribute to strengthening institutional capacity, fostering innovation in vocational education and supporting the green and digital transition within the VET sector.

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