

Initiation

ERASMUS+ CAPACITY BUILDING IN HIGHER EDUCATION

INITIATION

digital traNsformatlon and green Transition of hlgher educATion
InstitutiONs

Work Package 2: Task 2.2 Collection of innovative practices

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Task information

Aim of the task

The aim of this task is the collection of 20 EU best practices of technological advancements, and emerging trends in the digital and green innovation in Higher Education as success stories for the Western Balkan's context.

Version History

Version	Date	Description	Author
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Disclaimer

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Abbreviations

Abbreviation	Meaning
AI	Artificial Intelligence
AR	Augmented Reality
CBHE	Capacity Building in Higher Education
COVE	Centre of Vocational Excellence
CRTA	Regional Centre of Excellence for Robotic Technologies (Centar vrhunskosti za robotičke tehnologije)
DGE	Digital, Green, and Entrepreneurship
DX	Digital Transformation
EGD	European Green Deal
EIT	European Institute of Innovation and Technology
ERP	Enterprise Resource Planning
ESG	Environmental, Social, and Governance
EU	European Union
GDPR	General Data Protection Regulation
HE / HEI	Higher Education / Higher Education Institution
HR	Human Resource
IALF	International Association of Learning Factories
IOT	Internet of Things
IVAP	Innovation Vision Action Plan
KPI	Key Performance Indicator
LIT	Learning, Innovation and Technology (Unit)
MOOC	Massive Open Online Course
OER	Open Educational Resources
SDG	Sustainable Development Goals (United Nations)
SLFS	Smart Learning Factory – Skopje
SME	Small and Medium-sized Enterprise
STEM	Science, Technology, Engineering, and Mathematics
UN	United Nations
VET	Vocational Education and Training
WB	Western Balkans
WP	Work Package

Abstract

This document, prepared under Task 2.2 of WP2 of the INITIATION project, presents a selected collection of 22 European and national best practices in digital and green innovation within HEIs. Aimed at guiding the twin transition within the WB region, the document categorises proven benchmarks into five strategic thematic pillars: Strategic Vision and Interdisciplinary Integration, Curriculum Innovation and Pedagogical Excellence, Digital Transformation and Sustainable Infrastructure, Research, Collaboration, and Community Engagement and Monitoring and Sustainability Planning. By examining these success stories, the mapping exercise provides actionable insights, technological tools, and transferable governance frameworks to bridge advanced technology, pedagogical evolution, and environmental sustainability across HEIs.

Executive Summary

The INITIATION project aims to accelerate the digital transformation and green transition of HEIs in the WB by utilising European and national best practices. The Task 2.2 gathers and analyses 22 evidence-based success stories from partner institutions to serve as transferable benchmarks for the WB region.

The collection is structured into five core thematic pillars:

- **Strategic Vision and Interdisciplinary Integration:** Focuses on formal academic degree programmes, institutional governance reforms, and broad policy frameworks that embed the EGD, ESG principles, and cross-disciplinary leadership into university strategy.
- **Curriculum Innovation and Pedagogical Excellence:** Highlights interactive e-toolkits, digital pedagogy frameworks, AR resources, and centralised teaching support units designed to empower academic faculty and integrate sustainability across diverse curricula.
- **Digital Transformation and Sustainable Infrastructure:** Features physical living labs, LEED-certified smart campuses, robotics centres, and Industry 4.0 simulation environments that link green physical facilities with advanced digital systems.
- **Research, Collaboration, and Community Engagement:** Showcases open innovation web platforms, regional living lab networks, cross-border educational partnerships, and national competitions that connect HEIs with industry, secondary schools, and local communities.
- **Monitoring and Sustainability Planning:** Centres on targeted industrial reskilling initiatives, regional green skill academies, digital tracking ecosystems, and venture-building frameworks that ensure continuous workforce development and long-term sustainability execution.

The document demonstrates that successful twin-transition strategies require an integrated approach—combining institutional governance reforms, hands-on learning facilities, and cross-disciplinary curricula. These findings lay the foundation for WP2's State of the Art analysis and Strategic Recommendations Roadmap.



1. Aim of the Task

Task 2.2 focuses on gathering evidence-based, successful practices—including strategic frameworks, training programmes, and institutional policies—that showcase technological advancements and emerging trends in digital and green innovation within HE. Each project partner was required to collect three best practices designed to serve as actionable success stories and contextual benchmarks specifically tailored for HEIs in the WB.

2. Objective

The primary objective of Task 2.2 was to conduct targeted EU-level desk research to identify and evaluate evidence-based practices in digital and green innovation within HE, using these benchmarks to build an action-oriented Strategic Recommendations Roadmap. This roadmap will serve as a practical guide to drive strategic-level twin transitions (digital and green) specifically tailored for HEIs in Albania and Bosnia and Herzegovina.

3. Introduction

This section presents a selected collection of successful innovative practices, frameworks, training programmes, and institutional strategies gathered by the project partners of the INITIATION project (digital transformatiOn and green Transition of higher educATion InstitutiONs). The primary objective of this mapping exercise was to identify evidence-based European and regional benchmarks in technological advancements and emerging digital and green trends within HE. These proven success stories serve as transferable models to guide the twin transition within the WB context.

A total of 22 completed best practices were collected and analysed from the participating partner institutions. To provide a structured and strategic analysis for the WP2 State of the Art and Strategic Recommendations Roadmap, these practices have been categorised into five key thematic pillars. These pillars reflect the multi-dimensional approach required by modern HEIs to successfully bridge advanced technology, pedagogical evolution, and environmental sustainability.

- 1. Strategic Vision and Interdisciplinary Integration:** Interdisciplinary Master's degree programmes, institutional policy blueprints, and multi-university governance frameworks that align HE strategy with international climate agendas, ESG metrics, and overarching digital-green policy goals.
- 2. Curriculum Innovation and Pedagogical Excellence:** Capacity-building tools, AR educational resources, cross-disciplinary course auditing methods, and centralised institutional units (such as the LIT Unit) designed to upskill educators in digital pedagogy and sustainable curriculum design.
- 3. Digital Transformation and Sustainable Infrastructure:** Interactive, hands-on technological environments—including LEED-certified physical campuses, simulated smart learning factories, robotics centres, and living labs—that utilise digital twins, IoT, and smart grids to connect academic research directly with sustainable industrial applications.
- 4. Research, Collaboration, and Community Engagement:** Open web platforms, regional living lab ecosystems, multi-stakeholder industrial initiatives, and youth innovation competitions that bridge HEIs with external enterprises, regional government actors, secondary schools, and civil society.



5. **Monitoring and Sustainability Planning:** Specialised workforce reskilling initiatives, lifelong learning platforms, regional skill academies (such as GreetA), digital upskilling hubs, and start-up creation frameworks that focus on continuous tracking, market alignment, and long-term economic transition management

The following subsections detail each best practice within this five-pillar framework, highlighting their technological utility, measured impacts, and regional transferability.

4. Best Practices

4.1 Strategic Vision and Interdisciplinary Integration

This category consists of formalised HE degree programmes, institutional governance reform models, and strategic frameworks that explicitly merge digital literacy and sustainability metrics with organisational leadership and EU policy priorities.

4.1.1 MSc in European Green Transformation

Title	European Green Transformation (MSc Degree Programme)
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	Interdisciplinary, part-time academic Master's Degree Programme (MSc) Hybrid academic degree combining: - Asynchronous e learning and digital-first modular learning (highly flexible self-paced online modules) - Green technology learning (training circular economy, renewable energy, and sustainability reporting) Integration of EU policy frameworks (European Green Deal, UN Agenda 2030)
Date launched/published	Ongoing since the academic year 2025/26, the first cohort officially launched in the Winter semester of 2025.
Location/geographical coverage	Graz and Kapfenberg, Austria (FH JOANNEUM). However, because it is an English-taught, online-first programme, its geographical coverage extends across Europe and internationally.
Purpose	The programme is designed to train a new generation of transformative leaders and “change agents” capable of implementing the ambitious goals of the EGD. By bridging technical green solutions with strategic business management, it prepares professionals to drive sustainable transformation within a variety of organisational contexts.
Description	Developed collaboratively by the Institute of Energy, Transport and Environmental Management and the Institute of International Management and Entrepreneurship, this four-semester, part-time MSc programme integrates green technology, management and law, and transformational leadership into a coherent, practice-oriented curriculum. The Management and Law modules provide a comprehensive overview of the EGD and the UN Agenda 2030, builds an understanding of European legislation and institutions, and strengthens skills in

	innovation management, business modelling, and project management. Green technology modules focus on competencies in sustainable management, circular economy practices, sustainability reporting, industrial production processes, international supply chains, and European energy and transportation systems. Transformational leadership and change management courses teach students effective communication, leadership strategies, and stakeholder management approaches to navigate complex sustainability scenarios. To accommodate working professionals and international participants, the programme relies on a highly asynchronous, online-first learning format. Most coursework is completed digitally through structured e-learning environments, while two mandatory on-campus attendance weeks per semester (one in Graz and one in Kapfenberg) provide opportunities for networking, peer exchange, and hands-on experience in state-of-the-art energy and mobility laboratories. Graduates develop advanced competences in digital sustainability analytics, circular design thinking, energy systems modelling and optimisation, strategic sustainability leadership, and EU policy integration and reporting.
Success/impact achievement	Although newly established, the programme strategically addresses critical skill shortages needed to implement the EGD. By offering a flexible, digitally enabled format, it allows active professionals to upskill without interrupting their careers. Graduates are prepared to work as sustainability managers, circular economy consultants, and green transformation leaders, contributing to systemic environmental change across European SMEs, large corporations, and NGOs.
Lessons learned (Gaps identification & transferability)	A flexible, digital-first programme that integrates applied green technologies and EU policy frameworks can effectively address sustainability skills gaps and is easily transferable to other HEIs.
Link/Website	https://www.fh-joanneum.at/european-green-transformation/master/en/



4.1.2 MSc in Global Strategic Management

Title	Global Strategic Management (MSc Degree Programme)
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	This interdisciplinary Master's programme is designed to build advanced strategic management competences with a strong emphasis on digital transformation and global business environments. Key digital innovation elements include the use of contemporary digital learning tools (asynchronous learning modules, interactive case simulations, digital project platforms), business analytics and decision support systems, and digital collaboration tools. The programme also embeds sustainability thinking within global strategy, reflecting emerging trends that connect digitalisation with ESG priorities.
Date launched/published	Ongoing
Location/geographical coverage	Graz, Austria (FH JOANNEUM) – English-taught with international student participation and industry engagement.
Purpose	The programme aims to educate a new cohort of strategic managers capable of navigating the interconnected challenges of the global economy. It prepares students to lead digitally enhanced organisations, integrate sustainability into corporate strategy, and manage complex change processes that include digital, organisational and environmental dimensions.
Description	The Master's in Global Strategic Management offers four distinct study tracks, allowing students to specialise in areas aligned with evolving global business priorities: <i>Global AI-powered Business Evolution</i> addresses the rising role of AI in modern business. This track prepares students to apply AI tools and concepts to product and service innovation, optimise production processes, and evolve business models. It includes exposure to AI frameworks, ethical considerations (such as GDPR), and strategic applications of AI across functions. <i>Global Green and Social Business</i> focuses on sustainability and responsible value creation. Students deepen their understanding of economic, ecological and social sustainability, learning how organisations can achieve long-term welfare goals and integrate “green” priorities into core strategy and operations. It combines business fundamentals with sustainability frameworks and CSR concepts. <i>Global Leadership and HR Management</i> develops expertise in managing human capital in an increasingly digital and multicultural world. This track emphasises strategic HR management, leadership theories and practice, change management, negotiation and conflict resolution. Graduates gain the skills to lead organisations through transformation and effectively manage talent in dynamic environments. <i>Global Strategic Decision Making</i> equips students with advanced tools for analysing complex strategic problems and making informed business

	decisions. The curriculum integrates business intelligence, analytics, strategic risk assessment and global market dynamics to support resilient decision-making across international contexts. The programme combines digital lectures, case studies, and collaborative projects with opportunities for semester abroad and applied business lab work. Students use digital platforms for strategy simulations, analytics exercises, and team-based problem solving, mirroring contemporary organisational environments.
Success/impact achievement	Graduates develop a solid combination of strategic leadership, digital analytical skills, and global business insight. The programme strengthens organisational capacity for evidence-based decision making, global workforce leadership, and sustainable business practices. Alumni occupy roles such as strategic consultants, digital transformation managers, sustainability strategists and international business leaders. Its emphasis on real-world application and sector-agnostic competencies makes it a strong model for linking HE with industry demand.
Lessons learned (Gaps & identification transferability)	A modular study structure with clearly defined specialisation tracks enables HEIs to address diverse digital, AI and sustainability skill gaps while remaining flexible and easily adaptable to regional labour market needs.
Link/Website	https://www.fh-joanneum.at/en/studies/masters-degree-programme-in-global-strategic-management/

Image 1

Master's degree programme in Global Strategic Management



4.1.3 Advancing Sustainability in Higher Education for the Benefit of All (UNIGREEN)

Title	Advancing Sustainability in Higher Education for the Benefit of All (UNIGREEN)
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	Erasmus+ CBHE project. Institutional governance reform framework integrating: • Sustainability governance tools • Policy revision guidelines • MOOCs and digital learning platforms • Digital collaboration and management systems • Sustainability self-assessment and monitoring tools The project combines green transition, digital transformation, and institutional reform at managerial, administrative, and academic levels.
Date launched/published	2025
Location/geographical coverage	Kosovo, Albania, Greece, Poland (WB–EU partnership)
Purpose	To integrate sustainability principles into: • University governance structures • Administrative procedures • Academic curricula • Cross-sectoral cooperation with industry The project aims to transform HEIs into sustainability leaders aligned with: • EGD • SDGs • EU Global Gateway strategy
Description	UNIGREEN responds to systemic sustainability gaps identified in WB HEIs, including weak governance frameworks, limited sustainability curricula, and insufficient industry collaboration. The project operates through six Work Packages: • WP1: Project coordination • WP2: Embedding sustainability at managerial level • WP3: Embedding sustainability at administrative level • WP4: Embedding sustainability in academic curricula (courses & MOOCs) • WP5: Quality assurance • WP6: Dissemination & exploitation Core interventions include: • Policy revision guidelines • Leadership and staff training • Development of sustainability courses and MOOCs • Industry roundtables and job fairs • Creation of sustainability hubs • Digital learning repositories

Success/impact achievement	According to the proposal KPIs: • 12 new courses • 12 updated study programmes • 805 total persons reached (400 male, 400 female, 5 non-binary) • 1000 students/university staff reached • Institutional governance reforms introduced • Sustainability policies embedded at managerial, administrative and academic levels Short-, medium-, and long-term impacts include: • Institutional governance reform • Green job creation pathways • Increased employability • Cross-sectoral collaboration • Sustainable HEI transformation
Lessons learned (Gaps identification & transferability)	The proposal identifies three critical gaps in WB HEIs: 1. Weak sustainability governance frameworks 2. Limited sustainability integration in administration 3. Absence of systematic sustainability curricula Key lessons: • Sustainability must be embedded institution-wide (not isolated courses). • Governance reform is foundational to green transition. • Digital MOOCs increase regional accessibility and inclusion. • Industry partnerships are essential for green job creation. The model is highly transferable to other WB HEIs undergoing EU alignment and green transition reforms.
Link/Website	https://unigreenproject.com/

4.1.4 DISCO: Developing Innovative Sustainable Cooperation Opportunities

Title	DISCO: Developing Innovative Sustainable Cooperation Opportunities
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	Capacity-Building Framework & Innovation Hub (EIT HEI Initiative). Trends: AI, Digital Innovations, Sustainable Mobility, Global Business Services (GBS), and Deep Tech entrepreneurship.
Date launched/published	July 2022
Location/geographical coverage	Multinational: Led by Krakow University of Economics (Poland), with partners in Ukraine, Switzerland, and Norway.
Purpose	To boost the innovation and entrepreneurial capacity of HEIs by fostering the “Knowledge Triangle” (Education, Research, and Business) specifically in digital and sustainable sectors.
Description	DISCO established a series of Innovation Labs and a common MOOC focused on digital and green entrepreneurship. It utilised the HEInnovate self-assessment tool to help universities identify bottlenecks in their organisational structure and create “Innovation Vision Action Plans” (IVAPs).
Success/impact achievement	• Trained over 1,000 students and 150 academic/non-academic staff members. • Mentored and assisted 30+ start-ups and scale-ups. • Successfully integrated Ukrainian universities (e.g., Lviv Polytechnic), demonstrating that digital innovation allows for institutional continuity in crisis.
Lessons learned (Gaps identification & transferability)	HEIs in different regions start from vastly different baselines. DISCO identified that applying a “one-size-fits-all” digital strategy fails; instead, institutions need a tiered approach based on their current “innovation maturity” (using tools like HEInnovate).
Link/Website	https://heidisco.com/

4.2 Curriculum Innovation and Pedagogical Excellence

This category includes structured educational toolkits, AR-driven learning resources, cross-disciplinary teaching methodologies, and centralised institutional units designed to equip HE faculty and VET trainers with the digital competences needed to teach environmental sustainability effectively.

4.2.1 HEI GreenPath: Shaping HEI Environment for a Sustainable Tomorrow

Title	HEI GreenPath: Shaping HEI Environment for a Sustainable Tomorrow
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	Institutional Framework & Training Toolkit (Erasmus+ KA220-HED). Digital pedagogy for green skills, cross-disciplinary SDG integration, and e-learning for faculty upskilling.
Date launched/published	November 2024 (Duration: 2 years, active through 2026)
Location/geographical coverage	EU-wide. A consortium of universities from Cyprus, Poland, Greece, Malta, and Slovenia.
Purpose	To integrate green skills and sustainability concepts into the existing curricula of non-environmental departments (Humanities, Business, Social Sciences) and to equip faculty with the digital tools to teach these competencies effectively.
Description	The project focuses on three pillars: 1. Curriculum Auditing: Mapping existing courses against the UN SDGs. 2. Faculty Empowerment: Providing a digital training platform for educators to learn “how” to teach sustainability. 3. Eco-Digital Awareness: Launching university-wide awareness campaigns to shift behavioural patterns among students and staff.
Success/impact achievement	- Cross-Disciplinary Reach: Successfully embedded green modules into departments previously disconnected from environmental topics. - Strategic Recognition: Contributed to University's high ranking in the Times Higher Education Impact Rankings (Top 201-300 globally for SDG contribution). - International Synergy: Established a collaborative network of five EU HEIs sharing digital teaching resources.
Lessons learned (Gaps identification & transferability)	This project identified that students in Law, Education, and Business often graduate without understanding how their specific career paths impact climate change. Moreover, many faculty members have environmental knowledge but lack the pedagogical skills to teach sustainability using modern digital platforms.
Link/Website	https://hei-greenpath.eu/

4.2.2 GreenEDU e-Toolkit

Title	GreenEDU e-Toolkit
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	EU-funded project, AR technology
Date launched/published	2025
Location/geographical coverage	Poland, Estonia, Cyprus, Belgium
Purpose	The promotion of innovative teaching methods, with a particular emphasis on AR as a means of delivering immersive, experiential learning.
Description	The e-Toolkit has been developed by the GreenEDU Consortium Partners. Its objective is to create a space where HE educators, HE staff, leaders, and other relevant stakeholders can access knowledge and experience to inform their own work. The e-Toolkit contains information to help the aforementioned target audience understand the what and how of incorporating green skills in HE curricula, and gain knowledge on using AR tools to assist them in teaching these green skills and making learning more fun and interactive. Therefore, this e-Toolkit is a collection of guidelines and best practices on how HE educators can encourage and successfully engage students in education for green skills and the green economy through AR.
Success/impact achievement	The Toolkit supports HE educators, staff and leaders in: • Becoming familiar with the importance and context of green skills and the green economy through AR technology, • Gaining practical knowledge and getting inspired through other best practices on including green skills in their curricula, • Having access to the GreenEDU Education HE Strategy and being able to draft a Green Education Action Plan, and • Improving the students' green skills and greening HE activities
Lessons learned (Gaps identification & transferability)	It is a case that is easily transferable, and other countries can be taken as an example for the effective use of innovative technologies for Green Education.
Link/Website	https://tartuulikool.sharepoint.com/:b:/s/419Team/EcwjqAZKDktHglovVWPWbjcBFD6o3OIu6VDzcyNe9jg2KQ?e=dBZHsF

4.2.3 GROWS, “Moving towards a Green tRansitiOn through sustainable Waste management education in the VET Sector”

Title	GROWS, “Moving towards a Green tRansitiOn through sustainable Waste management education in the VET Sector”
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	EU-funded project, Toolkit
Date launched/published	2023
Location/geographical coverage	Poland, Greece, Cyprus, Portugal, Italy, and Bulgaria
Purpose	To raise awareness and empower the VET sector on the significance of sustainable waste management and the environment while improving the capacity of VET providers/trainers to implement activities in the field of environmental education with a focus on sustainable waste management and increase the levels of competences of VET providers on preparing and implementing a green education action plan.
Description	The toolkit includes an overview of the EGD on waste management and its practical application in VET education, emphasising strategic green practices for VET providers and the competencies required for VET trainers. It offers guidelines for developing a green strategy, including steps for creating a vision, setting priorities, and crafting a green education action plan that aligns with key directives and policies such as the EGD, the European Skills Agenda, and the Education for Sustainable Development Framework for 2030. Additionally, the toolkit covers teaching pedagogies and instructional strategies to promote sustainable competence and environmental awareness among learners. It provides practical advice for VET providers and trainers on effective strategies, tools, and approaches for green skills training and implementing sustainable waste management practices in the workplace.
Success/impact achievement	It has a great impact on HE sector, equipping faculty, students and staff with the necessary tools and knowledge to create a more sustainable and environmentally conscious workforce in the future.
Lessons learned (Gaps identification & transferability)	It is a case that is easily transferable and other countries can be taken as an example for the effective use of innovative technologies for Green Education.
Link/Website	https://projectgrows.eu/scorm/en/index.html#/

4.2.4 Learning, Innovation and Technology (LIT) Unit

Title	Establishment of a Centralised “Learning, Innovation and Technology” (LIT) Unit for Didactic and Methodological Transformation
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	The LIT Unit is an institutional strategy and capacity-building entity at FH JOANNEUM designed to support internal digital and pedagogical transformation. It integrates advanced Learning Management Systems (including an enhanced Moodle ecosystem), Digital Learning Design methodologies, OER, hybrid and fully digital learning environments, and practical applications of AI in education. By centralising these resources, the unit also contributes to green innovation by reducing paper use and lowering the physical carbon footprint of traditional teaching practices.
Date launched/published	Strategically reoriented and officially launched under the new mandate/name on July 1, 2025
Location/geographical coverage	Graz, Austria (FH JOANNEUM University of Applied Sciences)
Purpose	The unit was created to serve as the central institutional hub driving the university’s didactic, methodological, and digital transformation. Its primary goals are to equip teaching staff with advanced digital competencies, facilitate the responsible and effective integration of AI tools into education, and support the design of sustainable, future-proof teaching and learning formats.
Description	The LIT Unit at FH JOANNEUM demonstrates a structured, university-wide approach to digital and pedagogical transformation in HE. Rather than leaving digital and AI integration to individual faculties, the university established a centralised, multidisciplinary team comprising Learning Experience Designers, E-Learning Experts, AI specialists, and OER practitioners. This team provides comprehensive, structured support across six key pillars: • Training Courses and Workshops: Covering current topics in teaching and learning, including both pedagogical innovations and emerging digital tools. • AI in Education: Delivering practical workshops and clear guidelines for the responsible and effective use of AI tools in teaching and assessment. • University Didactics (HDW): A certified, three-module further education programme designed to maintain high standards in modern teaching practices. • Learning Design: Supporting faculty in creating interactive, resource-efficient digital and hybrid learning experiences. • Moodle & E-Learning Support: Ensuring the continuous technical and pedagogical development of the university’s central learning platform.

	• Individual Counselling: Providing tailored, solution-oriented advice to educators seeking to modernise and enhance their courses.
Success/impact achievement	By institutionalising digital and pedagogical support, the LIT unit effectively bridges the gap between technology and teaching methodology. The adoption of emerging technologies, such as AI, is guided by pedagogical principles rather than being technology-driven alone. The impact includes a digitally upskilled teaching workforce, standardised and high-quality learning environments for students, and the promotion of a continuous lifelong-learning culture among university staff. This centralised approach provides a highly effective and scalable model for HEIs seeking to implement sustainable digital transformation initiatives.
Lessons learned (Gaps & identification transferability)	A centralised support unit that combines pedagogy, digital technologies and AI governance enables HEIs to scale digital transformation efficiently while ensuring quality, consistency and sustainability across teaching practices.
Link/Website	https://www.fh-joanneum.at/en/university/organisation/service-departments/learning-innovation-and-technology/

Image 2

LIT Unit

DIVISION

Learning, Innovation and Technology

Teaching can do more. We show you how.



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4.2.5 DIGIVET – Digital Transformation in Vocational Education and Training

Title	DIGIVET – Digital Transformation in Vocational Education and Training (commonly referred to as DIGIVET)
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	Digital learning ecosystem integrating e-learning platforms, virtual classrooms, digital training tools, and blended learning methodologies. Utilises AI-supported learning, digital skills frameworks (e.g., DigComp), micro-credentials, and interactive training content, with increasing links to green skills and sustainable practices in VET.
Date launched/published	2021 (Erasmus+ VET / Capacity Building project – indicative period)
Location/geographical coverage	WB and EU partner countries, with focus on Albania and regional VET ecosystems
Purpose	To modernise VET systems by enhancing digital competences of learners and educators, and supporting institutions in adopting innovative, technology-driven teaching and learning approaches
Description	DIGIVET focuses on strengthening digital readiness in VET institutions through the development of digital curricula, training modules, and capacity-building programmes for teachers and trainers. The project promotes blended and online learning models, supports digital transformation strategies, and enhances the alignment of VET education with labour market needs, including emerging digital and green jobs
Success/impact achievement	Improved digital competences of VET teachers and learners: - Development of digital training materials and e-learning modules - Increased adoption of blended and online learning approaches - Strengthened institutional digital capacities and infrastructure - Better alignment of VET education with labour market and digital economy needs - Contribution to resilient and future-ready VET systems
Lessons learned (Gaps identification & transferability)	Lessons learned: - Need for continuous capacity building of VET educators in digital pedagogy - Gaps in digital infrastructure and access to technology - Importance of institutional commitment to digital transformation Transferability: - Digital training models are highly replicable across VET institutions and sectors - Can be integrated with green skills, entrepreneurship, and sector-specific training programmes - Strong potential for scaling through micro-credentials and lifelong learning frameworks
Link/Website	https://digivetproject.com/

4.3 Digital Transformation and Sustainable Infrastructure

These practices focus on hands-on, highly interactive technological environments and sustainable physical facilities—such as simulated factories, smart grids, green university campuses, and robotics hubs—that bridge academic research with real-world industrial and operational execution.

4.3.1 Smart Learning Factory – Skopje

Title	Smart Learning Factory – Skopje
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	Learning Factory - the concept of a “learning factory” refers to a facility and programme that provides hands-on, interdisciplinary and industry-focused engineering design projects to students. Smart Learning Factory – Skopje integrates many new digital technologies of Industry 4.0 within its didactical process including sensors and actuators, management systems (ERP), digital assembly assistance systems, robot, energy management etc.
Date launched/published	April 2023
Location/geographical coverage	Skopje, North Macedonia
Purpose	The Factory includes the following: 1. Showroom to discover new technologies for Lean and Industry 4.0 2. Laboratory for experimenting with new tech and scenarios 3. Training centre for upskilling and reskilling 4. Development hub for integrated solutions for the industry
Description	The SLFS is a revolutionary educational facility that combines cutting-edge technology and innovative teaching methods to create an immersive learning experience. With its six base modules simulating small-scale production environments, this learning factory offers its users a unique opportunity to gain hands-on experience regarding Lean and Industry 4.0. The state-of-the-art didactic equipment, purposefully designed for teaching and learning purposes, ensures seamless integration of theory and practice. The factory’s modern and user-friendly design enhances the learning environment, stimulating creativity and engagement. The factory’s modular equipment design allows for swift reconfiguration, facilitating the creation of diverse physical layouts to accommodate various learning objectives. By providing a dynamic and versatile learning space, the SLFS empowers its users to acquire practical skills, foster innovation, and prepare for real-world challenges in an ever-evolving industrial landscape. One of the advantages of the SLFS lies in its didactic nature, allowing for seamless integration of real-world product simulation. The SLFS is specifically designed to accommodate didactic products, which are simplified versions of real products tailored to enhance the learning process. This unique feature enables students and users to gain practical experience while grasping the fundamental concepts of product development. SLFS is significantly strong in the field

	of hands-on trainings in the field of Lean management and digital transformation in manufacturing.
Success/impact achievement	SLFS hosted many hands-on trainings for more than 40 different companies including: - Lean management - Lean Six Sigma - Productivity in Industry 4.0 - Modelling and simulation etc. SLFS so far was a successful partner (through UKIM and FME) in several European projects including: Learn4SMEs, CompetenSEE and AISkills4Lean (funded by EIT Manufacturing), DigiTS-ME, Team 5.0, Lean4.0Waste, Regional Challenge Fund etc. SLFS is part of EIT Infrabooster – a programme for commercialisation of research infrastructure and candidate for the IALF.
Lessons learned (Gaps identification & transferability)	Offering hands-on training is rare within the Macedonian ecosystem therefore this is a great competitive advantage of SLFS. The infrastructure is also used in academic education mostly related to Industrial Engineering and Management subjects; however, the mentioned financial sustainability significantly helps for modernisation and maintenance of the laboratory. The learning factory concept is easily applicable to any university laboratory that can offer training and didactical concepts that will strengthen the relationship between industry, academia and students.
Link/Website	https://learningfactory.mf.edu.mk/

Image 3

Smart Learning Factory



4.3.2 Learning Factory (Lernfabrik) – TU Darmstadt

Title	Learning Factory (Lernfabrik) – TU Darmstadt
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	Learning Factory model integrating: • Industry 4.0 technologies (IoT, cyber-physical systems) • Digital twins and production simulation • Lean management tools • Energy-efficient production systems • Human-centred smart manufacturing
Date launched/published	Ongoing development since early 2010s (continuous expansion)
Location/geographical coverage	Darmstadt, Germany
Purpose	To provide hands-on, practice-oriented education in: • Smart manufacturing • Digital transformation • Lean and sustainable production • Integration of green manufacturing principles
Description	The Learning Factory at Technische Universität Darmstadt is a real production-like environment, where students and industry professionals work on simulated but realistic manufacturing systems.
Success/impact achievement	• Strong university–industry collaboration • International recognition as a model for applied engineering education • Integration into the IALF • Continuous upskilling of SMEs
Lessons learned (Gaps identification & transferability)	• Learning-by-doing significantly increases digital and green competences. • Learning factories create a bridge between academia and industry. • The model is highly transferable to technical universities with laboratory infrastructure.
Link/Website	https://www.ptw.tu-darmstadt.de/

4.3.3 UNIC Athens Campus

Title	Sustainable Campus Infrastructure and Digital Transformation – UNIC Athens Campus
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	Sustainable green building infrastructure combined with advanced digital educational platforms: • LEED Gold Certified smart building features (energy-efficient systems, resource management, indoor environmental quality monitoring). • Technology-enhanced learning tools and digital educational platforms. • Modern student-centred digital services and administrative operational tools
Date launched/published	2025
Location/geographical coverage	Athens, Greece
Purpose	To drive a whole-institution twin transition by: • Reducing environmental impact through sustainable, energy-efficient campus design. • Enhancing operational efficiency via integrated digital systems. • Fostering an eco-friendly and digitally empowered learning ecosystem aligned with European priorities.
Description	UNIC Athens serves as a model of modern, sustainable HE infrastructure combined with digital innovation. The campus holds LEED Gold Certification, demonstrating top-tier performance in energy efficiency, sustainable resource management, and healthy indoor environments. Alongside its physical green design, the institution integrates technology-enhanced learning solutions, digital platforms, and streamlined online student services to deliver a holistic, resilient, and future-proof academic environment.
Success/impact achievement	• Attainment of LEED Gold Certification, validating international standards in sustainable campus development. • Optimisation of building energy performance and resource consumption. • Seamless delivery of technology-driven academic programmes and efficient digital student services. • Establishment of a whole-institution framework combining physical green transformation with digital education.
Lessons learned (Gaps identification & transferability)	• Sustainable physical campus upgrades work best when paired with digital infrastructure, creating a multi-dimensional approach to university modernisation. • Investing in high-standard green certifications (like LEED) sets a clear operational benchmark and builds a strong culture of environmental awareness across students and staff.

	The model is highly transferable to other urban HEI campuses seeking to align physical facilities with EU green and digital targets.
Link/Website	https://www.unic.ac.cy/athens/athens-campus/

Image 4

UNIC Athens Campus

Innovation by the Mediterranean

The academic heart of the campus comprises 14 teaching rooms and two amphitheatres, complemented by 10 specially designed Problem-Based Learning (PBL) rooms that facilitate collaborative learning and interactive teaching methods. These spaces are equipped with advanced technology to support modern pedagogical approaches.



4.3.4 Regional Centre of Excellence for Robotic Technologies (CRTA)

Title	Regional Centre of Excellence for Robotic Technologies (CRTA) – University of Zagreb, Faculty of Electrical Engineering and Computing (FER)
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	Advanced research and training centre integrating robotics, AI, automation, Industry 4.0 technologies, digital systems, and applications in smart industry and energy-efficient production.
Date launched/published	Operational since late 2010s (with continuous development).
Location/geographical coverage	Zagreb, Croatia (national and international cooperation).
Purpose	To strengthen research, education and industry collaboration in robotics, automation and digital transformation, contributing to sustainable and efficient industrial systems.
Description	CRTA operates as a multidisciplinary centre connecting research, teaching and industrial applications in robotics and intelligent systems. It supports applied research projects, student involvement in innovation activities, and collaboration with companies in automation and smart manufacturing. The centre contributes to digital transformation of industry and development of resource-efficient and high-precision systems aligned with green transition objectives.
Success/impact achievement	Strong participation in EU research projects (Horizon and related programmes), high employability of graduates in high-tech sectors, increased research output and technology transfer to industry.
Lessons learned (Gaps identification & transferability)	Specialised centres of excellence strengthen regional innovation ecosystems. Close cooperation with industry ensures relevance of digital and green competences. The model is transferable to technical universities aiming to position themselves in Industry 4.0 and sustainable automation fields.
Link/Website	https://www.fer.unizg.hr/

Image 5

Regional Centre of Excellence for Robotic Technologies (CRTA)



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4.3.5 TU Delft Green Village – Delft University of Technology

Title	TU Delft Green Village – Delft University of Technology
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	Living laboratory platform integrating smart grids, renewable energy systems, hydrogen technologies, circular construction materials, IoT-based monitoring systems, digital twins, and real-life sustainability experimentation infrastructure.
Date launched/published	Established in 2017 (continuous expansion).
Location/geographical coverage	Delft, The Netherlands (international research collaboration).
Purpose	To accelerate sustainable innovation by providing a real-life testing environment where researchers, students, start-ups and companies can develop and test green technologies under real operating conditions.
Description	The Green Village at TU Delft is a fully operational living lab located on campus, designed as a real-scale experimental environment for sustainable technologies. Unlike traditional laboratories, solutions are tested in real-life conditions, including energy systems, building materials, mobility solutions and smart infrastructure.
Success/impact achievement	Strong collaboration with industry and government, acceleration of sustainable start-ups, international recognition as a leading living lab model, and contribution to EU climate and energy transition goals.
Lessons learned (Gaps identification & transferability)	Real-world experimentation significantly accelerates green innovation. Living labs create strong university–industry ecosystems and increase societal impact. The model is transferable to universities aiming to connect research, digital technologies and sustainability in applied environments.
Link/Website	https://www.thegreenvillage.org/

Image 6

The Green Village, TU Delft campus



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Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Education and Culture Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.



4.4 Research, Collaboration, and Community Engagement

This pillar encompasses open digital platforms, cross-border living lab networks, university-industry alliance projects, and youth entrepreneurship calls that facilitate multi-stakeholder knowledge transfer, community outreach, and regional co-creation.

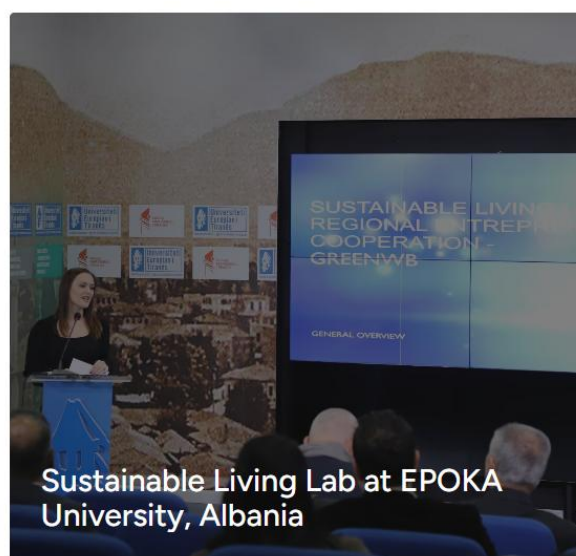
4.4.1 GREENWB – Sustainable Living Labs for Regional Entrepreneurial Cooperation in the WB

Title	GREENWB – Sustainable Living Labs for Regional Entrepreneurial Cooperation in the WB
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	Living Labs ecosystem combining green innovation, circular economy practices, digital collaboration platforms, and entrepreneurship support tools. It integrates co-creation methodologies, data-driven decision-making, smart sustainability solutions, and green business modelling frameworks aligned with EU Green Deal and digital transition priorities
Date launched/published	2023 (Erasmus+ Capacity Building in Higher Education project – indicative start period)
Location/geographical coverage	WB (primarily Albania and Kosovo, with regional cooperation and EU partner involvement)
Purpose	To strengthen cooperation between academia, industry, and society through Sustainable Living Labs, fostering green entrepreneurship, innovation capacity, and regional development in the WB.
Description	GREENWB establishes Sustainable Living Labs within HEIs to serve as innovation hubs where students, researchers, businesses, and public actors co-create solutions for sustainability challenges. The project supports entrepreneurial education, green skills development, and knowledge transfer, promoting circular economy practices and sustainable business models. It also enhances institutional capacity of HEIs to act as drivers of regional green transition and innovation ecosystems.
Success/impact achievement	- Establishment of functional Living Labs in partner HEIs - Strengthened academia–industry collaboration in green sectors - Increased student and researcher engagement in innovation activities - Development of green business ideas and start-ups - Contribution to regional innovation ecosystems and sustainable economic development - Enhanced institutional capacity for sustainability-oriented education and research
Lessons learned (Gaps identification & transferability)	Lessons learned: - Need for stronger policy alignment and institutional support mechanisms for Living Labs - Importance of continuous stakeholder engagement (quadruple helix) - Capacity gaps in green entrepreneurship and commercialisation skills Transferability: - Living Lab model is highly replicable across HEIs in WB and beyond

	- Scalable through digital tools and regional networks - Applicable to other sectors (e.g., smart cities, energy, circular economy)
Link/Website	https://www.greenwb.eu/

Image 7

Living labs in Albania

Innovation in Action for
a Sustainable Future

4.4.2 GITEKA - Green Industrial Transformation through Education in Kosovo and Albania

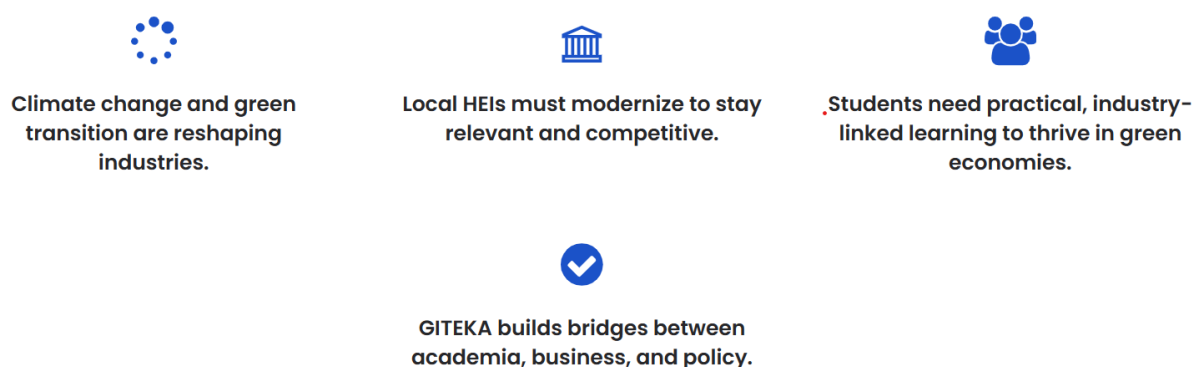
Title	GITEKA - Green Industrial Transformation through Education in Kosovo and Albania
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	The GITEKA Project aims to drive a sustainable green transformation in Kosovo and Albania by bridging education and industry. Through innovation in HE, capacity-building, and collaboration with local stakeholders, the project supports the development of skills and knowledge needed for a greener industrial future.
Date launched/published	2025
Location/geographical coverage	WB Countries: Albania Kosovo EU HEIs: Poland, Romania
Purpose	The GITEKA Project aims to drive a sustainable green transformation in Kosovo and Albania by bridging education and industry. Through innovation in HE, capacity-building, and collaboration with local stakeholders, the project supports the development of skills and knowledge needed for a greener industrial future priority of sustainable growth and jobs. Its objectives are as follows: 1. Curriculum Integration Embedding sustainability and green skills into university programmes to prepare students for climate-neutral and sustainable manufacturing careers. 2. Circular Economy Equipping students and staff with the knowledge to apply circular economy principles—promoting reuse, resource efficiency, and waste reduction. 3. Technological Innovation Integrating digital tools, simulations, and online platforms to create dynamic, industry-ready learning environments. 4. Green Deal Alignment Making sustainability and digitalisation core values of HE to drive green transformation and empower students as change-makers.
Description	This project brings together HEIs, industry leaders, and innovation intermediaries from Kosovo and Albania, in close collaboration with EU partners from Poland and Romania. It serves as a transformative model for HE–industry partnerships, aiming to revitalise the manufacturing sector by building a strong bridge between academic research and industrial application. By aligning with the objectives of Erasmus+ CBHE Strand 1, GITEKA is deeply committed to driving the Green and Circular Economy—a cornerstone of the EU Green Deal—and supporting the broader priority of sustainable growth and jobs.

Success/impact achievement	The project is still under development and will be finalised until November 2027. So far it has involved the gap analysis of industry needs and academic offer, it has processed with workshops on training the staff to address this gap with curricula enrichment and it has recently finalised the roadmap of course creation. By July 2026 the full course package will be available for use. University of New York Tirana is engaged to create 3 courses on business innovation and one course on design and architecture to address the industry needs and embed circular/sustainable economy modules.
Lessons learned (Gaps identification & transferability)	So far, the market needs have been identified and the modules have been pre-defined. What is expected is that these modules will close the gaps and will address pressing issues linked with current sustainable practices.
Link/Website	https://giteka-project.com/

Image 8

GITEKA project's website

Why It Matters



4.4.3 COWEB - Collaborative Open Web Platform for Entrepreneurship and Innovation in the WB

Title	COWEB – Collaborative Open Web Platform for Entrepreneurship and Innovation in the WB (<i>commonly referred to as COWEB</i>)
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	Digital innovation ecosystem combining online collaborative platforms, virtual mobility tools, OERs, and entrepreneurship support systems. Utilises AI-supported learning environments, digital co-creation tools, e-learning platforms, and open innovation methodologies, with links to green and sustainable entrepreneurship practices.
Date launched/published	2020 (Erasmus+ Capacity Building in Higher Education project - indicative period)
Location/geographical coverage	WB (Albania, Kosovo, Montenegro, etc.) with EU partner collaboration, enabling cross-regional knowledge transfer
Purpose	To enhance digital entrepreneurship education and innovation capacity in HEIs by creating a collaborative digital platform that connects academia, students, start-ups, and industry across the WB.
Description	COWEB developed a Collaborative Open Web Platform that enables co-creation, digital learning, and entrepreneurship development. The project supports HEIs in integrating entrepreneurship into curricula, fostering virtual collaboration between students and businesses, and promoting innovation through digital tools. It also strengthens academic–industry partnerships and provides training resources, mentoring schemes, and start-up support mechanisms.
Success/impact achievement	Development and deployment of a digital collaboration platform: - Increased student participation in entrepreneurship and innovation activities - Strengthened digital and entrepreneurial skills among students and staff - Enhanced virtual mobility and cross-border collaboration - Creation of start-up ideas and innovation projects - Contribution to digital transformation of HEIs in the WB region
Lessons learned (Gaps identification & transferability)	Lessons learned: - Need for stronger integration of digital platforms into institutional strategies - Importance of user engagement and continuous content updating - Gaps in advanced digital skills and platform sustainability Transferability: - Platform model is highly scalable and replicable across regions and disciplines - Can be adapted for AI-driven, green, and sector-specific innovation ecosystems - Strong potential for integration with future EU projects and digital education initiatives
Link/Website	https://www.cowebproject.eu/

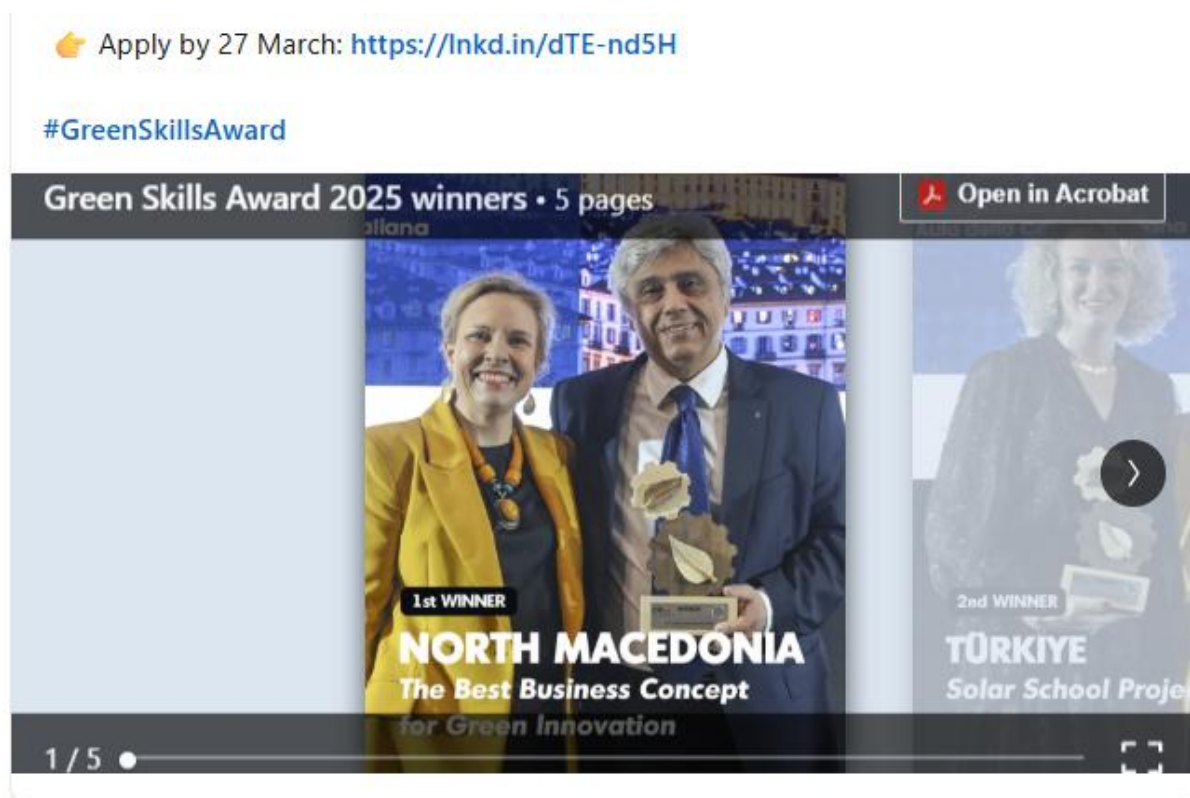
4.4.4 Best Business Concept in Green Innovation

Title	National competition for secondary schools “Best Business Concept in Green Innovation”
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	National competition fostering entrepreneurial and green skills. The initiative uses simple but effective digital tools for: online submission of business concepts, digital pre-evaluation by expert jury members, live digital voting during the final event. The competition integrates emerging trends in green and circular economy solutions, sustainable product and service design, early-stage innovation and entrepreneurial education.
Date launched/published	First competition held in 2007. It has evolved in response to changing skills requirement (from “Best Business Concept” to “Best Business Concept in Green Innovation”).
Location/geographical coverage	North Macedonia
Purpose	• To develop entrepreneurial, green, and soft skills among youth aligned with latest technological and sustainability trends. • To strengthen the national skills ecosystem through collaboration between secondary schools, HE, and industry. • To foster employability, creativity, innovation thinking, and social responsibility from an early age. • To motivate secondary school students to pursue further education, particularly in STEM fields.
Description	The competition is co-organised by the Faculty of Mechanical Engineering-Skopje, UKIM (since 2022 supported by the Centre for Excellence in Green Innovation) and the National Centre for Development of Innovation and Entrepreneurial Learning. It engages both students and their teachers-mentors, promoting the role of both youth and educators in driving sustainable innovation. Through an open national call, secondary school students and their professor-mentors submit business concepts online. Student teams work for several months on developing their ideas, including problem identification, value proposition, sustainability dimension, and basic financial and market considerations. The received applications are reviewed by expert jury composed of professionals from different partner organisations, supporters and sponsors. The top 16 teams are then selected to advance to the next stage, the Grand Final at the Faculty of Mechanical Engineering-Skopje, where they pitch their ideas in front of a jury and hear other students’ creative solutions for a greener and more sustainable future.
Success/impact achievement	- Winner of the European Training Foundation (ETF) Green Skills Award 2025: https://www.etf.europa.eu/en/green-skills-award-finalists-2025) (from 250 applications from 50+ countries)

	- Almost 20 years of impact – a long-standing initiative evolving from “National Best Business Plan Competition” to “Best Business Concept for Green Innovation” - Reaching >100 students, >50 secondary school teachers annually, strengthening cooperation between secondary education, HE, industry - Contribution to increased student enrolment at the Faculty of Mechanical Engineering-Skopje (or STEM-related fields)
Lessons learned (Gaps identification & transferability)	Early exposure to entrepreneurship significantly increases students’ motivation and confidence. Teacher involvement is critical; trained and motivated mentors directly influence the quality of student outputs. The model can be replicated at international level, strengthening the institutional internationalisation and knowledge exchange.
Link/Website	https://www.youtube.com/watch?v=li0BTKkHkXo

Image 9

Competition of “Best Business Concept in Green Innovation”



4.5 Monitoring and Sustainability Planning

These initiatives utilise digital platforms, long-term educational academies, and structured upskilling frameworks to execute target-driven green workforce reskilling, support eco-venture creation, and continuously track skills development for long-term regional transition.

4.5.1 Project “Enhancing ESM’s Role in North Macedonia’s Just Transition”

Title	Project “Enhancing ESM’s Role in North Macedonia’s Just Transition” (Power Plants of North Macedonia)
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	Tailor-made, practice-oriented reskilling and upskilling programmes; although primarily face-to-face and practically oriented, the programmes are supported by structured electronic learning materials.
Date launched/published	Recent implementation (2025-2026)
Location/geographic coverage	North Macedonia
Purpose	Reskill workers of the Power Plants of North Macedonia for sustainable energy shift, boosting productivity and human capital in green economy amid coal phase-out.
Description	The initiative was developed in cooperation with Japan International Cooperation Agency and managed with support from the European Bank for Reconstruction and Development. The Faculty of Mechanical Engineering-UKIM through its Centre for Research, Development and Continuous Learning (CIRKO) designed and delivered customised training modules based on identified company skills gaps. The programmes covered productivity in service and production systems, energy management, Production Supervisor training for Lean Industry 4.0, and photovoltaic power plant installer training.
Success/impact achievement	A total of 525 AD ESM employees were successfully trained, strengthening the company’s internal capacity to manage green transition processes and improving workforce readiness for renewable energy and efficiency-oriented roles. The project reinforced the university’s role as a strategic partner in national economic and environmental transformation.
Lessons learned (Gaps identification & transferability)	A key lesson is that effective reskilling requires close alignment between industry needs and academic expertise. The model is highly transferable to other HEIs, especially in regions facing industrial decarbonisation, provided that strong university–industry partnerships, tailored curricula, and institutional commitment to applied lifelong learning are ensured.
Link/Website	https://www.linkedin.com/company/jetipmk/ https://www.esm.com.mk/?p=18543

4.5.2 GreetA – Green Transformation Academy Austria

Title	GreetA – Green Transformation Academy Austria (Centre of Vocational Excellence in Green Innovation)
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	GreetA is a non-profit association under HE leadership that combines an open digital coordination platform with structured networking and capacity-building activities. Through digital mapping and aggregation of education and training offers, GreetA enables transparent access to green and digital skills development. The association fosters collaboration between universities, VET providers, industry and the public sector, promoting competencies in areas such as sustainability management, renewable energy, the circular economy and other green innovation fields.
Date launched/published	GreetA was initially established in May 2022, originating from the Erasmus+ project GREENOVET. Its scope and long-term impact were significantly expanded with the launch of a comprehensive, publicly accessible digital platform in April 2025.
Location/geographical coverage	Austria (headquartered in Graz, Styria, with nationwide coverage across multiple Austrian regions).
Purpose	GreetA was created to establish a sustainable and scalable lifelong learning ecosystem that strengthens both vocational and HE in the context of the climate, energy, mobility and materials transitions. The association's goal is to empower individuals and organisations to effectively navigate and lead the green transformation by coordinating educational resources, promoting synergies and connecting green educators with learners and employers.
Description	GreetA functions as an open, collaborative digital platform coordinating regional educational actors. It provides a centralised, easily accessible overview of over 260 academic and vocational training programmes (Bachelor's, Master's, and certificate courses) focused entirely on sustainability and green technologies across Austria. Through this alliance, institutions pool their resources to offer targeted education in areas like green production, environmental systems, and smart materials. Beyond its digital presence, GreetA functions as a coordination hub that connects educational providers with industry and public sector actors, facilitating exchange, cooperation and joint development of qualifications aligned with current workforce needs.
Success/impact achievement	GreetA has successfully centralised access to hundreds of green-skills programmes, drastically lowering the barrier for workers and students seeking upskilling opportunities. Its collaborative framework strengthens relationships between HEIs, VET providers and the business community, and cooperation with networks and international CoVEs addressing skills for the green economy. These outcomes demonstrate long-term institutional impact even beyond initial project funding.

Lessons learned (Gaps & identification transferability)	A HEI-led association that combines a green skills education platform with cross-sector coordination can sustainably close green skills gaps and offers a highly transferable model for regions seeking long-term impact beyond project-based funding.
Link/Website	https://greentransformation.academy/

Image 10

GreetA – Green Transformation Academy Austria

GreetA, as a knowledge and innovation hub, pursues the following goals:



Skills training of the workforce

GreetA promotes the qualification of the workforce in Austrian regions, thus contributing to competitiveness and sustainability.



Synergy pooling

GreetA coordinates regional stakeholders and improves access to educational opportunities, promotes synergies and strengthens cooperation between education providers, businesses and the public sector.



Partner network

GreetA serves as an open platform where providers of green education can network with demanders (e.g., industry and SMEs).



4.5.3 MSc in Digital Entrepreneurship

Title	Digital Entrepreneurship (MSc Degree Programme)
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	This Master's programme focuses on digital business creation and innovation, combining technology-driven entrepreneurship with advanced digital tools for business development. It integrates digital platforms for ideation, data analytics for market validation, digital product design tools, and business simulation environments. While not exclusively green, it equips students to design sustainable digital ventures that address contemporary economic and social challenges.
Date launched/published	Ongoing
Location/geographical coverage	Graz, Austria (FH JOANNEUM) – English-taught and open to international applicants.
Purpose	The programme aims to build entrepreneurial capacities that utilise digital technologies for new venture creation, innovation management, and value generation. It is designed to enhance digital business leaders who can operate in dynamic, technology-driven markets and develop ventures that contribute to economic competitiveness and societal well-being.
Description	Digital Entrepreneurship combines core entrepreneurship studies with comprehensive exposure to digital innovation tools and methodologies. Students are trained in digital business modelling, digital marketing analytics, customer data platforms, agile product development, and start-up growth strategies. The curriculum includes hands-on use of prototyping tools, business simulation software, and collaboration platforms for remote teams. Students work on real venture projects, using digital project management tools to plan, test, iterate and pitch business ideas. The programme's learning environment emphasises experimentation and practice. It offers a blend of asynchronous online content, interactive workshops, and mentor-led sessions with innovators and entrepreneurs. Participants gain experience with digital business ecosystems, learn to apply data-driven decision-making, and develop pitches and business plans for digital ventures.
Success/impact achievement	Graduates develop capabilities to launch and scale digital start-ups, work in innovation units of established companies or lead projects that require digital business acumen. Many alumni have entered roles as start-up founders, digital product managers, innovation consultants, and intrapreneurs driving change within organisations. The programme significantly enhances digital entrepreneurial skills and contributes to a culture of innovation that supports regional economic development.
Lessons learned (Gaps identification & transferability)	Practice-oriented entrepreneurship education that integrates digital tools, real venture projects and flexible learning formats effectively builds transferable digital innovation skills and can be readily replicated by HEIs with strong links to local start-up and business ecosystems.
Link/Website	https://www.fh-joanneum.at/digital-entrepreneurship/master/en/

4.5.4 University Green Digital Hub

Title	University Green Digital HUB
Type of resource (technology used and emerging trends in the digital and green innovation utilised)	E-learning programme consisted of 6 online modules with complete set of learning materials and tools for developing digital, green and entrepreneurship skills.
Date launched/published	2023
Location/geographical coverage	Netherlands, Germany, Croatia, Spain, Germany
Purpose	To strengthen the digital, green and entrepreneurial skills of university students, start-ups and staff while contributing to Europe's goal of the digital and green transition. It focused on the development of a new university DGE support model that combines tailored eLearning, cross-sector and multicultural collaboration in learn by doing activities, peer knowledge transfer that will result in a more efficient way of gaining the required skills, and combined key competencies for the green digital transition.
Description	This eLearning platform, part of the EU-funded project UGDH, implemented a series of targeted activities to achieve its objectives of enhancing DGE skills among target groups. University staff and trainers were trained, a database of DGE courses was created, a programme framework and a DGE learning programme were developed and a DGE Knowledge Factory e-learning platform with educational materials was launched.
Success/impact achievement	The project successfully bridged the gap between academia and industry by launching a multilingual e-learning platform and a certified DGE upskilling programme. Its primary impact lies in the Greenpreneur factory, which provided university start-ups with the structured support and international competition needed to scale green-digital innovations. Ultimately, it created a repeatable, data-driven framework for fostering sustainable entrepreneurship through recognised digital credentials.
Lessons learned (Gaps identification & transferability)	The project's transferability is high due to its modular e-learning infrastructure and "Train the Trainer" methodology, which allow the DGE curriculum to be adapted across different regions and languages. Furthermore, the use of standardised Europass credentials and a structured "Greenpreneur" framework provides a plug-and-play blueprint for any institution looking to link academic innovation with green-digital markets.
Link/Website	https://www.ugd-hub.com/