



HOLISTIC **METHODOLOGY**

TEACHING TRANSVERSAL GREEN SKILLS IN TOURISM VET



TRANS4GREEN: Scenario-based Learning for Green Transversal (1) Skills in Tourism"







With the collaborative efforts of:

International Management Institute

Graičiūnas School of Management

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Project co-funded by the European Union.

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This document is a key output of the Erasmus+ KA2 VET project TRANS4GREEN "Scenario-based Learning for Green Transversal Skills in Tourism"

TRANS4GREEN is a project that aims to integrate green transversal skills into the vocational education and training in tourism in Bulgaria, Türkiye and Lithuania in order to increase the capacity of learners and graduates with different profiles to benefit from the emerging career opportunities offered by sustainable tourism.

The **focus** of the initiative is on the enhancement of employability in the dynamically developing tourism sector. Taking into account the global drive for green transformation and its associated challenges and employment opportunities—particularly in tourism—the project seeks to improve the quality and relevance of vocational training. It emphasizes transversal skills (i.e., soft and personal skills), which are valuable across various occupations and life situations and have been identified by ESCO as essential for modern professions. In doing so, TRANS4GREEN helps equip current and future tourism workers to recognize and inspire individual and collective responsibility for protecting and restoring the local and global environment (ESCO) thereby enhancing the overall professionalism of the tourism sector and driving its 'green' transition.

The **success and longevity** of the project is ensured by the consideration of the current needs of the tourism sector, the reference to European Skills, Competences, Qualifications and Occupations (ESCO) classification, and the provision of ways to integrate the developed training content into the current vocational training curricula of the partner countries, while respecting national educational standards. Furthermore, critical aspects such as sustainability, transferability and accessibility of the project results are emphasized.

The TRANS4GREEN project is an initiative of 3 partners - 2 VET and 1 LLL/CVET providers for tourism occupations:

International Management Institute

(Bulgaria)

Graiciunas
School of
Management

(Lithuania)

Şaban Temuge Vocational and Technical High School

(Türkiye)



The best way to predict the future is to create it.

Peter Drucker



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INTRODUCTION



IMPORTANCE OF GREEN TOURISM

The <u>2030 Agenda for Sustainable Development</u> and its 17 Sustainable Development Goals (SDGs) adopted by world leaders in 2015, remain a key framework for addressing poverty, environmental protection, and inequality. They urged governments, organizations, and individuals to embrace sustainable practices that foster long-term environmental, economic, and social stability. Most powerfully, an ever-growing global movement led by younger generations is demanding stronger and more targeted actions on climate change from businesses (WTTC, 2024).

The travel and tourism sector is a cornerstone for the global economy. It contributes significantly to GDP, stimulates investment, and supports millions of jobs across various skill levels—from hospitality and transportation to cultural and creative industries. Beyond its economic impact, tourism serves as a catalyst for regional development, particularly in rural and underserved areas, by creating business opportunities and improving infrastructure. Moreover, it promotes cultural exchange, social inclusion, and community empowerment, providing opportunities for marginalized groups, including youth, women, and people with disabilities, to access decent work and sustainable livelihoods.

The travel and tourism sector **heavily depends on environmental resources**, as natural landscapes, cultural heritage, and biodiversity form the foundation of its appeal. However, it is also a **significant contributor** to environmental degradation, including greenhouse gas emissions, pollution, resource depletion, and ecosystem disruption.

In this context, it is essential for the travel and tourism industry to intensify its efforts to combat climate change and environmental degradation by exploring all available pathways toward a more sustainable and resilient tourism model—one that balances the needs of people, the planet, and prosperity.

More than ever, the future of the industry will depend on its ability and commitment to driving meaningful change through initiatives such as fostering innovation (both technological and non-technological), developing corporate sustainability strategies and enhancing corporate engagement. Most importantly, the sector must focus on cultivating strong leadership and developing a skilled workforce capable of implementing sustainable practices and promoting greener behaviors and sustainable consumption.

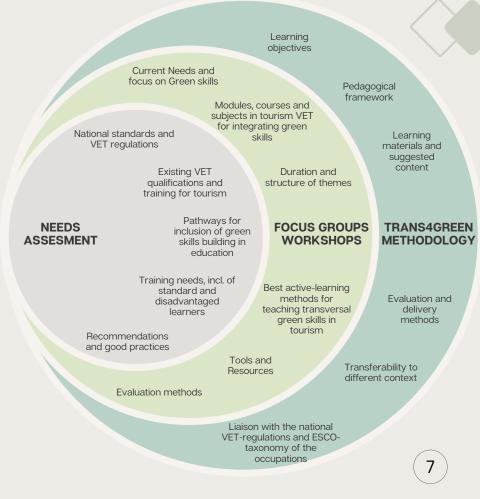
BRIEF OVERVIEW OF THE METHODOLOGY AND ITS CHAPTERS

The TRANS4GREEN Methodology, outlined in this document addresses the urgent need for intensifying the tourism sector's efforts towards sustainability. It provides a structured and systematic framework for integrating green transversal skills into existing tourism VET curricula and in accordance with the applicable national standards of Bulgaria, Türkiye, and Lithuania. It also raises awareness and offers guidance on the application of active learning methods—a highly effective pedagogical approach for building, re-skilling, and upskilling green competencies. By blending theoretical knowledge with practical, experiential, and reflective learning, it equips learners with the skills, attitudes, and behaviors needed to address environmental challenges in both their professional and personal lives.

Aligned with the <u>European Classification of Occupations</u>, <u>Skills</u>, and <u>Competences</u> (<u>ESCO</u>); the TRANS4GREEN Methodology is designed to meet the diverse needs of regular learners, industry professionals, and disadvantaged groups. By fostering the development of in-demand green skills, it enhances employability and ensures learners are well-prepared for the transition to a greener, more sustainable economy.

The Methodology is based on the results of preliminary research conducted at the start of the TRANS4GREEN project. This research aimed to identify opportunities for integrating green skills into tourism VET programs and to define key attributes for high-quality teaching, learning, and assessment of green skills. The research process included:

- 1) needs analysis a desk review of the possibilities for integrating green skills into the framework of existing VET programs in tourism. The findings were discussed and validated during a stakeholder consultation (the international workshop "Green Transformation Skills in Tourism"), held in Varna, Bulgaria on June 12, 2024, and
- 2) co-design focus groups three workshops held in the partner countries to evaluate the most effective active-learning methods for teaching transversal green skills in tourism.



To ensure the Methodology's relevance and effectiveness, consultations at both activities involved VET providers, tourism business representatives, and learners — including potential employees from disadvantaged groups

Based on the findings of these activities, the current Methodology suggests incorporating transversal green skills into tourism VET through a structured set of 6 sustainability-focused themes, collectively referred to as the *TRANS4GREEN training program*. Each of these themes has distinct learning outcomes, allowing for flexible implementation—either as standalone modules, in combination with others, or as a comprehensive program. Furthermore, the themes could be easily integrated within different educational contexts – existing VET curricula, informal training, onthe job training or even individual training.

This Methodology comprises seven key chapters:

- Chapter 1 is introductory.
- Chapter 2 introduces readers to the foundational basis for the document's development, specifically the current context in which the tourism sector flourishes, the growing importance of green skills for enhancing business performance and employability, and the role of the VET sector in building green skills and fostering a sustainable mindset.
- Chapter 3 explains the concept of the proposed training program, including its learning objectives and outcomes, structure, themes, and duration, aligning it with the needs outlined in previous sections.
- Chapter 4 describes the the liaison of the Methodology with national VET regulations in partner countries (Bulgaria, Türkiye, and Lithuania).
- Chapter 5 presents in details the content of the green themes covered in the training.
- Chapter 6 outlines the pedagogical approach and active learning methods recommended to facilitate green skills development, as well as guidance on organizing training adapted to the needs of disadvantaged learners.
- Chapter 7 provides guidance on the transferability of the suggested training program.



HOW TO USE THIS METHODOLOGY?

The **TRANS4GREEN Methodology** is not an exhaustive guide, nor it does aim to cover every aspect of organizing green skills training. Instead, it serves as a foundational resource that is intended to inform and inspire training providers to review and refine practices and developing improvement plans in vocational education and training (VET) with focus on integrating green-skills training.

The Methodology provides a structured and organized framework for teaching green skills, enabling VET administrators, educators and trainers to integrate it seamlessly into existing formal tourism curricula, as VET curricula are most commonly built around a set of general and specialized modules.

However, as tourism VET covers several professional fields and occupations and there is no one size fits all solution, in order to be effective and practical, the TRANS4GREEN training program focuses on 3 crucial job profiles:

- (a) Hotel Administrator / Hotel Receptionist,
- (b) Waiter / Bartender and
- (c) Travel Agent / Travel Consultant.

While this focus could be seen mostly in the set of training resources, supporting the Methodology (the TRANS4GREEN ToolBox), with minimal adaptations the program is easily transferable to other tourism occupations. Although, it might require additional refining, the Methodology is also transferable to other professional fields covered in VET such as business and management, personal services, etc.

The modular structure of the Methodology allows for flexibility, enabling users to adopt either the full training program or specific themes based on their learning objectives. That enables non-formal education providers to utilize it in designing targeted workshops, upskilling programs, or community-based learning initiatives focused on sustainable tourism. Additionally, individual learners and professionals can follow the methodology for self-paced learning, using its structured themes to enhance their green skills and career readiness.



KEY STEPS FOR USING THE METHODOLOGY:

By following this structured approach, trainers can effectively develop learners' sustainability competencies and prepare them for the green transition in tourism.

	UNDERSTAND THE PURPOSE
	o The methodology aims to equip learners with essential green skills aligned with ESCO's transversal competencies.
	o It integrates scenario-based learning, active learning strategies, and real-world applications to enhance engagement.
	EXPLORE THE STRUCTURE
	o The document outlines the context of green tourism, the importance of sustainability in VET, and the link to national regulations.
	o It includes detailed training content, themes, and learning outcomes aligned with key sustainability competencies.
	ADAPT TO YOUR TRAINING NEEDS
	o The methodology is flexible and can be embedded into existing tourism VET modules.
	o Trainers can select specific themes or apply the full program depending on course requirements.
	USE THE SUPPORTING TOOLS
4	o The TRANS4GREEN ToolBox includes structured training materials, case studies, and scenario-based exercises.
_	o The TRANS4GREEN Guidelines provide additional support for organizing training sessions effectively.
	IMPLEMENT AND ASSESS LEARNING
	o The methodology proposes a framework to assess learners' engagement, knowledge, and behavior.
	o Educators are encouraged to use active learning methods like

tasks.

group discussions, case studies, and real-life problem-solving

GREEN SKILLS AND THEIR RELATION TO TOURISM SECTOR. CURRENT AND FUTURE NEEDS OF TOURISM INDUSTRY, VET SECTOR AND VET LEARNERS



THE DYNAMIC CHARACTER OF TOURISM AND ITS CURRENT NEEDS, SUSTAINABLE TOURISM PERSPECTIVES

Over the past decade, the SDG framework, related legislative measures and investments have driven a green, digital, and socially just transition across industries. From manufacturing and energy to agriculture and construction, green principles are reshaping how businesses produce, promote, and dispose of goods and services.

Tourism is one of the most dynamic and fastest growing industries in the world serving as a key engine of global economic growth and job creation.

Tourism has a two-way relationship with the environment, as it both relies on natural and local resources and significantly impacts them. The quality of the environment is a key attraction for visitors, with nature and landscape being major factors in destination choice and repeat visits.

Europe is the world leading tourist destination, largely because of its combined natural and cultural attractiveness (with 453 <u>inscribed</u> sites, it accounts, for instance, for nearly half of the <u>UNESCO World Heritage List</u>).

Tourism is the third largest economic sector in the EU, accounting for more than half of all <u>international tourist arrivals</u> in 2023, with over 700 million visitors (according to <u>Statista</u>) and contributing to over two trillion euros to <u>Europe's GDP</u>, while directly and indirectly generating nearly 40 million <u>jobs</u>.

However, due to its vast scale, tourism also has considerable environmental consequences.

In 2023, the global tourism industry accounted for approximately 8% of global greenhouse gas emissions, contributing to climate change. The hospitality and tourism sector significantly impacts global energy consumption (10.6%) and water use (5.8%), as well as air pollution and material extraction (WTTC, 2023).

Legislators and policymakers are placing increasing pressure on the travel and tourism industry to enhance sustainability performance. A set legislative proposals introduced in December 2021 includes measures to reduce food waste, limit single-use plastics, and enhance waste management. Additionally, various plans and roadmaps outline strategies to accelerate the sector's transition to more sustainable practices.

Despite efforts to reduce plastic waste, it remains prevalent in hotels and restaurants, contributing to pollution. Water usage in hotels is often much higher than that of local communities. Additionally, the industry negatively impacts biodiversity through land use, pollution, greenhouse gas emissions, and supply chain activities, threatening the very natural environments that attract guests.

At the same time, growing traveler awareness of sustainability—evident in their behavior (according to the <u>Booking.com Sustainable Travel Report 2024</u>)—is also driving the industry toward greater environmental responsibility.

Given these challenges, tourism must optimize resource use and minimize its environmental impact to address climate change. Its interconnectedness with other industries also positions it as a catalyst for transformative change toward sustainability. Achieving this requires adopting new technologies and equipping the workforce with green competencies to lead sustainability efforts.

BENEFITS OF EQUIPPING CURRENT AND FUTURE TOURISM WORKERS WITH GREEN SKILLS

Tourism is a labor-intensive sector that provides employment opportunities for people with a wide range of skills, including those with lower qualifications and from vulnerable groups such as migrants, women, young people and people with mild disabilities. Consequently, the travel and industry has a social responsibility to integrate these individuals into the labor market and help them develop essential skills, work habits and a professional culture that will enhance their employment prospects and career opportunities.

According to Eurostat, in 2023, the tourism industry employed more women than men, and in the accommodation subsector, 25% of employees had a lower educational level.

Traditionally, tourism industries have a particularly young workforce, as they offer accessible entry points into the job market.

To align business strategies with sustainability commitments, tourism sector adapts existing products or develops new ones. Current green trends in tourism focus on integrating circular economy principles, eco-tourism, and resource efficiency into business operations. This includes optimizing natural resource use, adopting clean energy solutions (e.g., solar, hydrogen), and obtaining sustainability certifications, such as those that measure and reduce greenhouse gas emissions and carbon output.

Digital and sustainable innovations are transforming the daily tasks of tourism workers. The impact on workers depends on their level of responsibility in green and digital practices and their ability to influence employers towards more sustainable practices. That is, to what extent they have managerial responsibilities and are leading and shaping the transition of tasks towards more sustainability-oriented practices.

Workers with higher qualifications (i.e. ISCED level 6 upwards) are better placed to influence change due to being more directly involved in decision-making around service provision and product acquisition. Workers with qualifications below ISCED level 6 are likely to have a less direct impact on changing their workplace practices but they do play a vital role in ensuring sustainability, efficiency and overall improvement in the way they carry out their work, prepare products and provide services, for example ensuring equipment is turned off when not in use, following recycling policies, etc. (UNESCO, 2024)

Therefore, equipping tourism workers with **green skills** offers numerous benefits, including increased employability and the ability to meet the growing demand for sustainable tourism. Workers can contribute to creating more environmentally responsible tourism experiences that appeal to eco-conscious travelers. Green skills also foster innovation in developing sustainable solutions and practices within the industry. By embedding these competencies, the tourism sector can reduce its environmental impact and enhance its reputation for sustainability.

ROLE OF VET IN PROVIDING EMPLOYABLE WORKFORCE

The green transition is significantly reshaping the global labor market. These shifts are leading to widespread skills imbalances across industries and regions. Many employers struggle to find workers with the right skills and the right balance of technical and human skills, highlighting the need for targeted education and training solutions.

According to the World Economic Forum's <u>Future of Jobs Report 2025</u>, global macro trends (i.e. technological change, green transition, demographic shifts, geoeconomic fragmentation and economic uncertainty) are projected to generate 170 million new jobs this decade, while 92 million roles will be displaced. Moreover, the nature of existing jobs is rapidly evolving, with employers predicting that 39% of essential job market skills will change by 2030.

Vocational Education and Training (VET) plays a key role in equipping young people and adults with the employable skills that align with labor market needs today and in the near future. VET provides essential skills for the entire economy, ensuring a steady supply of a qualified workforce (Figure 1).

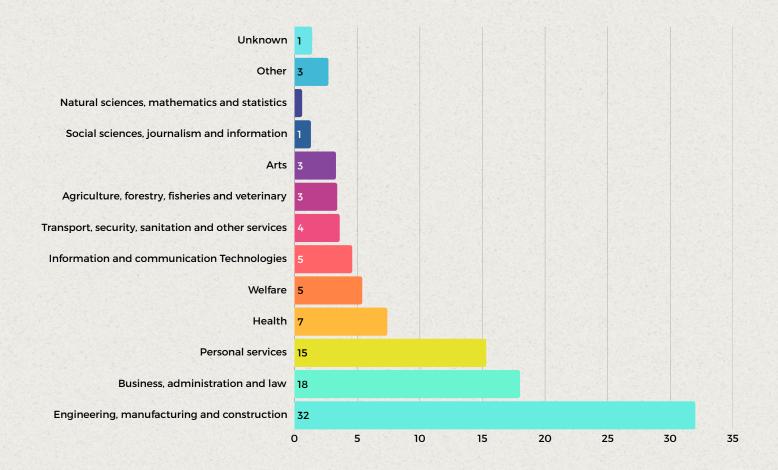


Figure 1. VET graduates by field of study, rounded numbers Source: Cedefop

As to Cedefop's <u>Key indicators for VET</u>, initial VET attracts nearly half of all upper secondary students, with participation rates of 54.8% in Bulgaria, 27% in Lithuania, and 37% in Türkiye. Initial vocational education and training (IVET) prepares young people for employment, while continuous vocational education and training (CVET) offers numerous opportunities for adults to reskill and upskill. However, increasing adult participation in lifelong learning remains a challenge.

Many typical VET occupations, such as personal care and service roles, remain difficult to automate. This means that while these fields will continue to offer stable employment opportunities, industries will also face the challenge of ensuring a skilled workforce to meet evolving labor market demands.

The majority of tourism enterprises are SMEs, primarily operating in accommodation, food and beverage services. These businesses often face challenges such as limited financial resources and a lack of expertise in implementing sustainability initiatives. However, the most significant barrier to their green transition is the skills gap. According to the <u>Future of Jobs Report 2025</u>, approximately 69% of tourism employers plan to prioritize hiring staff with new skills as part of their workforce strategy by 2030 to meet evolving business needs.

To reach its full potential in today's evolving landscape and effectively support the green and digital transition across industries, VET must take on a leadership role and undergo re-engineering efforts on manifold fronts, as recommended in various action plans, guidelines and thematic <u>publications</u>.

Firstly, the VET system needs to digitalize more intensively, addressing not only learning and teaching but also internal processes and infrastructure. Equally important, VET must embrace and implement the <u>Education for Sustainable Development (ESD)</u> concept, prioritizing the integration of real-world climate and environmental issues into educational curricula. Updating initial education and training programs is essential to prepare young people for these new realities—both by equipping them with transversal skills that enhance adaptability and resilience and by developing the technical and occupation-specific skills that are in high demand.

Additionally, making the VET system more inclusive is critical to ensuring it remains an attractive and accessible option for learners from diverse backgrounds with varying needs and aspirations. These re-engineering efforts can be further supported by the increased use of technology in VET, enhancing accessibility, attractiveness, effectiveness, and efficiency in delivering education and training (including by increasing the modularization options).

By strengthening its role in workforce preparation, VET can ensure that labor markets have a steady pipeline of skilled workers, capable of meeting the demands of a rapidly changing economic and technological landscape.

ESCO GREEN TRANSVERSAL SKILLS

The ESCO (<u>European Skills, Competences, Qualifications and Occupations</u>) framework helps bridge the gap between education and employment by ensuring that VET programs align with labor market needs. It supports job matching, career guidance, and workforce mobility within the EU by offering a common language for skills and occupations across different countries and industries.

The ESCO classification of skills includes four key categories, one of which is transversal skills. These skills are encompassing core competencies such as learning to learn (supporting lifelong learning), communication, teamwork, and problem-solving—long-standing pillars of employability. With rapid technological advancements and the increasing automation of processes, these core skills, along with a broader set of transversal competencies, are now often referred to as "21st-century skills." As job roles continue to evolve at an unprecedented pace, these foundational skills are becoming more critical than ever, enabling workers to adapt to change, tackle complex challenges, and collaborate effectively.

ESCO version 1.1.1 includes **381 skills, 185 knowledge concepts and 5 transversal skills** considered most relevant for a **greener labor market.** As transversal skills and competences are relevant across a wide range of occupations and economic sectors are therefore considered critical for **adapting the economies to environmental challenges.** Incorporating these skills into the workforce enhances the industry's ability to meet green standards and regulatory requirements. This is reflected in ESCO version 1.1.1, where the five green transversal skills are categorized under **T6 – Life Skills and Competences.**

ESCO is aligned with existing EU competency frameworks such as <u>DigComp</u>, <u>EntreComp</u>, <u>LifeComp</u> in the sense that ESCO's transversal skills' model was developed taking into account these different frameworks.

THE TRANS4GREEN TRAINING



TRANS4GREEN TRAINING OVERVIEW AND FOCUS

Considering the challenges and opportunities outlined in previous sections, the current Methodology proposes a flexible approach to integrating green transversal skills into existing tourism VET curricula. This approach enables the VET system to respond swiftly to evolving industry needs, bridging the gap before broader reengineering efforts take effect.

The Methodology suggests incorporating transversal green skills into tourism VET through a structured set of sustainability-focused themes, collectively referred to as the *TRANS4GREEN training program*. Each theme has distinct learning outcomes, allowing for flexible implementation—either as standalone modules, in combination with others, or as a comprehensive program.

The TRANS4GREEN themes address EQF level 3 and upwards and are further aligned with the national requirements (see Section 6). To ensure international recognition, TRANS4GREEN aligns with the ESCO classification, facilitating compatibility across different national contexts. In addition, the program encourages the implementation of the <u>European sustainability competence framework (GreenComp)</u>.

In the course of the TRANS4GREEN project, it was recognized that tourism VET spans multiple fields (e.g., personal services, travel, tourism, and leisure) and covers various occupational levels—from operational to executive roles. Thus, the TRANS4GREEN themes were carefully selected to allow for seamless integration into core training modules that are common across different VET courses. These include subjects such as "Health and Safety at Work", "Environmental Protection", "Professional Ethics and Tourist Behavior" and "Additional Preparation" which provide a relevant framework for embedding eco-related topics.

Since there is no single solution applicable to all tourism sub-sectors and occupations—and given the financial and time constraints of the project—it was not possible to develop training that is suitable and context relevant for all available job roles. Therefore, in alignment with the project's objectives, the TRANS4GREEN partners worked to identify those job roles where transversal skills training would be most beneficial.



Three key occupations were selected, forming the core focus of the TRANS4GREEN training program:

- Hotel Administrator / Hotel Receptionist
- Waiter / Bartender
- Travel Agent / Travel Consultant.

These roles were chosen for the following reasons:

- Vocational education and training (VET) qualification courses for these occupations are widely available across partner countries and beyond;
- The majority of European tourism enterprises operate in the accommodation, food and beverage, and travel and tourism industries, where a significant portion of jobs are concentrated;
- These positions are commonly held by young people, individuals with low qualifications, and members of vulnerable groups;
- According to the World Economic Forum's Future of Jobs 2025 report, these roles are expected to grow in importance in the near future;
- Given their direct interaction with customers and team members, as well as their specific job responsibilities, these roles are well positioned to positively influence both the sustainability performance of enterprises and the behavior of people toward sustainable practices.
- Strengthening transversal skills for individuals in these roles will enhance their employability, whether in their current positions or in broader career opportunities.

Yet, with minimum adjustments the program is easily transferable to other tourism occupations, as proposed in the next sections of the current document.

To effectively equip learners with green skills, the TRANS4GREEN program is supported by the **TRANS4GREEN Toolbox**. This includes immersive training materials, such as real-world scenarios that require learners to navigate tourism-related situations while making decisions on **communication**, **teamwork**, and **problem-solving**. By fostering practical, hands-on experiences, the program ensures that learners not only understand environmental challenges but are also equipped to implement sustainable solutions in their workplaces.

TRANS4GREEN's approach empowers future tourism professionals to drive meaningful change, making sustainability an integral part of the sector.

STRUCTURE, THEMES AND LEARNING OBJECTIVES OF THE TRANS4GREEN TRAINING PROGRAM

TRANS4GREEN Methodology and training focuses on **6 themes** related to **transversal green skills as identified in ESCO.** One of them is the introduction to the TRANS4GREEN world and encompasses the principles of sustainability, efficient resource use, circular economy concepts, the role and challenges of tourism in sustainable development. The other 5 themes align with the green transversal skills.

The general learning objective of the TRANS4GREEN training program focus on providing learners with knowledge for the environmental impact of tourism and equipping them with essential green skills for sustainable tourism practices. These include promoting sustainability and environmental responsibility in tourism through ethical sourcing, biodiversity conservation, and efficient resource use. The training emphasizes zero-waste practices, sustainable mobility, and the empowerment of others to adopt eco-friendly behaviors through effective communication and leadership. Additionally, learners will develop the ethical awareness needed to evaluate and reduce the environmental impact of their personal and workplace actions.

The training program has the following core aims/tasks:

- to enhance learners' knowledge regarding the environmental impact of tourism and relevant tourism sector policies;
- to equip learners with the knowledge and skills necessary to promote sustainability and environmental responsibility within the tourism sector;
- to encourage the adoption of sustainable practices, including ethical sourcing, biodiversity conservation, and resource efficiency;
- to advance zero-waste practices and sustainable mobility;
- to empower learners to effectively communicate and lead in fostering sustainable behaviors in others; and
- to cultivate ethical awareness, enabling learners to evaluate and reduce the environmental impact of personal and workplace actions.

Learning objectives are based on knowledge, skills and attitude.

THEME CODE T 01

THEME TITLE

SUSTAINABILITY AND ENVIRONMENTAL RESPONSIBILITY IN TOURISM

ESCO REFERENCE

Not relevant

THEME OVERVIEW

This theme explores the core principles of sustainability and their application within the tourism sector. It begins with an introduction to sustainability, focusing on its fundamental principles and how they intersect with environmental, economic, and social dimensions. The theme delves into the role of sustainable development goals (SDGs) in guiding global environmental protection efforts and the importance of adopting these goals in tourism practices. Special emphasis is placed on efficient use of natural resources and the concept of a circular economy, which promotes sustainability through reuse, recycling, and minimizing waste.

Further, the theme highlights the critical role of tourism in sustainable development, addressing the challenges the sector faces in balancing economic growth with environmental protection and social well-being. Practical aspects of environmental protection in tourism are explored, with strategies for integrating sustainability into tourism operations. Learners will gain a deeper understanding of how tourism businesses can mitigate their environmental impact while fostering long-term positive outcomes for local communities and ecosystems.

LEARNING OBJECTIVES

- 1. To build learners' understanding of the environmental impact of tourism, environmental policies in tourism sector and the fundamental principles of sustainability and their application in tourism practices, with a focus on environmental, economic, and social dimensions.
- 2. To provide learners with the knowledge needed to recognize the importance of sustainable development goals (SDGs) in guiding environmental protection efforts within the tourism industry.
- 3. To equip learners with the ability to develop strategies for the efficient use of natural resources and the application of circular economy principles in tourism operations.
- 4. To build learners' skills to analyze the challenges and opportunities of integrating sustainability into tourism development, balancing economic, environmental, and social factors.
- 5. To strengthen learners' capacity to identify and apply practical strategies for environmental protection in tourism, ensuring sustainable business practices that benefit the environment and local communities.

EXPECTED LEARNING OUTCOMES

Knowledge

- ✓ Understand the environmental impact of tourism and tourism sector policies for environmental protection;
- ✓ Understand key principles of sustainability and how they are applied within the tourism sector, including the environmental, economic, and social aspects;
- ✓ Recognize the role of the Sustainable Development Goals (SDGs) in guiding sustainability practices and environmental protection within tourism;
- ✓ Comprehend the concept of circular economy and how it contributes to resource efficiency and waste reduction in tourism operations.

Skills

- ✓ Adapt to change in tourism sector and shift ✓ Demonstrate competence in implementing to green economy;
- ✓ Implement environmental action plans and sustainable tourism practices, including ethical sourcing, biodiversity conservation, and minimizing environmental impact in tourism enterprises;
- ✓ Apply effective techniques to ensure efficient use of natural resources in tourism businesses. focusing on sustainability;
- ✓ Develop for integrating strategies sustainability into tourism operations, balancing economic arowth with environmental and social considerations.

Competence

- sustainable tourism operations, reducing environmental impacts while benefiting local communities:
- ✓ Lead and inspire sustainable initiatives within tourism organizations, fostering the adoption of eco-friendly practices among colleagues and stakeholders:
- ✓ Assess the environmental impact of tourism activities and develop strategies to mitigate these impacts for long-term sustainability.

TRAINING METHODOLOGY				
TOPIC			HOURS	
Introduction to sustainability. Principles of sustainability	Theory	Practical training	Assessment	Individual learning
Sustainable development goals, economic growth and strategies of environmental protection				
Efficient use of natural resources in the economy. Circular Economy	45 min	60 min	30 min	90 min
The role and challenges of environmental protection in tourism			cademic hours (135 r	**

THEME CODE T 02 THEME TITLE PROMOTING SUSTAINABLE PRACTICES IN TOURISM ENTERPRISES THROUGH ETHICAL SOURCING, BIODIVERSITY CONSERVATION, AND ENVIRONMENTALLY RESPONSIBLE OPERATIONS

ESCO REFERENCE

ADOPT WAYS TO FOSTER BIODIVERSITY AND ANIMAL WELFARE

THEME OVERVIEW

This theme emphasizes the integration of sustainable practices in tourism enterprises, focusing on ethical sourcing, biodiversity conservation, and environmentally responsible operations. It explores the significant role that natural resources play in the tourism industry and how these resources can be used sustainably to minimize negative environmental impacts. By prioritizing local and ethical sourcing, tourism businesses can reduce their carbon footprint and support biodiversity, thus contributing to the health of local ecosystems.

The theme also delves into biodiversity-friendly operations, where sustainable practices are applied in accommodation management, restaurant operations, and tour activities to protect natural ecosystems and promote animal welfare. Additionally, it highlights the importance of personal and professional choices in adopting sustainable behaviors within daily operations and decision-making processes, such as sustainable menu planning. Practical aspects, including the adoption of sustainable food habits, are covered to provide actionable insights for both individuals and enterprises in the tourism sector.

LEARNING OBJECTIVES

- 1.Understand the relationship between tourism and natural resources, and how sustainable use can minimize environmental impact.
- 2. Identify and implement local and ethical sourcing practices that reduce environmental impact and support biodiversity in tourism enterprises.
- 3. Develop and apply biodiversity-friendly operational strategies in accommodation, restaurants, and tour activities to protect ecosystems and promote animal welfare.
- 4. Encourage and promote sustainable behaviors within tourism enterprises by making informed personal and professional choices.
- 5. Integrate sustainable food habits into tourism operations to enhance environmental responsibility and reduce the ecological footprint of tourism activities.

EVDE	CTED		COLITCOMEC
EXPE	CIED	LEARNING	GOUTCOMES

Knowledge

✓ Understand the relationship between

tourism and natural resources, and how their

sustainable use can minimize environmental

✓ Recognize local and ethical sourcing

practices that reduce environmental impact

and support biodiversity in tourism enterprises.

✓ Understand biodiversity-friendly operational

strategies in accommodation, restaurants, and

tour activities to protect ecosystems and

promote animal welfare.

impact.

✓ Develop and implement local and ethical sourcing practices in tourism operations to reduce environmental impact.

Skills

- ✓ Make decisions regarding the animal's welfare and apply biodiversity-friendly operational strategies in various tourism services, ensuring the protection of ecosystems and animal welfare.
- ✓ Promote sustainable behaviors within tourism enterprises by influencing daily operational and decision-making processes.

Competence

- ✓ Demonstrate the ability to manage tourism enterprises sustainably, integrating practices that reduce environmental impact and support biodiversity.
- ✓ Lead efforts in adopting ethical sourcing and sustainable practices in tourism operations to contribute to environmental responsibility.
- ✓ Evaluate and enhance sustainable food habits in tourism enterprises, reducing the ecological footprint promoting and sustainability.

TRAINING METHODOLOGY

TOPIC HOURS Tourism and nature – natural resources being used in the tourism industry Local and ethical sourcing - prioritizing local products and ethical ingredients in tourism activities to reduce the environmental impact and support biodiversity Biodiversity-friendly operations - implementing sustainable practices in accommodation 45 min 60 min management, restaurant operations and tour activities that protect natural ecosystems and animal welfare Personal and professional choices - encouraging individuals and enterprises in tourism to adopt sustainable behaviors in daily operations and decision-making (sustainable menu, sustainable food habits)

Individual learning 30 min 90 min

devoted to guided training (theory and practice) and assessment

THEME CODE T 03 THEME TITLE

ENCOURAGING SUSTAINABLE CONSUMPTION AND RESOURCE EFFICIENCY TO MINIMIZE ENVIRONMENTAL IMPACT

ESCO REFERENCE

ADOPT WAYS TO REDUCE NEGATIVE IMPACT OF CONSUMPTION

THEME OVERVIEW

This theme focuses on fostering sustainable consumption patterns and improving resource efficiency in the tourism sector to minimize environmental impact. By integrating principles of sustainability into daily operations, it aims to promote ethical and mindful consumption among individuals and organizations. Key aspects include reducing waste, optimizing the use of natural resources, and encouraging environmentally conscious practices in personal and professional contexts.

The theme also highlights the importance of evaluating and understanding the environmental consequences of consumption habits, empowering tourism professionals and stakeholders to make informed decisions that support long-term sustainability goals. Through practical tools and education, this theme seeks to drive positive behavioral changes and instill a culture of responsibility within the industry, aligning with global environmental and green agenda initiatives.

LEARNING OBJECTIVES

- 1. To enhance learners' understanding of sustainable consumption and resource efficiency for reducing environmental impact;
- 2. To expand learners' awareness of environmental footprint and consequences of resource consumption and (food and plastic) waste generation;
- 3. To equip learners with the necessary skills to identify and implement resource efficiency strategies in personal and professional contexts and promote sustainable practices;
- 4. To build learners' capacity to adapt to change and perform services in a flexible manner and promoting sustainable alternatives to traditional practices;
- 5. To strengthen learner's competences to develop and implement environmentally sustainable practices at the workplace.

EXPECTED LEARNING OUTCOM	ES	
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Knowledge

- ✓ Understand environmental impact of tourism and the need of applying the principles of sustainable consumption for reducing environmental impact.
- ✓ Explain waste reduction techniques, including alternatives to single-use plastics and food waste management.
- ✓ Identify key resource efficiency strategies in personal and professional contexts, including energy, water, and material conservation.
- ✓ Recognize the environmental consequences of overconsumption and the benefits of mindful purchasing and shared resource use.

Skills

- ✓ Perform services in a flexible way/ develop solutions to avoid single-use plastics and food waste and promoting sustainable alternatives to traditional practices.
- ✓ Develop strategies to avoid the use of single-use plastics and food waste.
- ✓ Apply practices for sustainable resource management, including energy efficiency and and food waste management.
- ✓ Minimize water and energy consumption.

Competence

- ✓ Take responsibility for minimizing the environmental impact of personal and professional actions through sustainable decision-making.
- ✓ Make informed choices for sustainable consumption and lifestyles.
- ✓ Evaluate and enhance resource efficient and waste reduction practices in the workplace.
- ✓ Commit to develop solutions fo environmentally harmful behavior.

TOPIC TOPIC Principles of Sustainable Consumption and Resource Efficiency Waste Management and Alternatives to Overconsumption Behavioral Change for Long-Term Sustainability TOPIC HOURS Theory Practical training Assessment londividual learning 60 min 45 min 30 min 90 min

Recommended workload: 3 academic hours (135 minutes), devoted to guided training (theory and practice) and assessment activities. Self-learning is excluded from total workload, and its duration depends on the learner's pace.

THEME CODE T 04

THEME TITLE

ADVANCING ZERO-WASTE PRACTICES AND SUSTAINABLE MOBILITY TO PROTECT THE ENVIRONMENT

ESCO REFERENCE

ADOPT WAYS TO REDUCE POLLUTION

THEME OVERVIEW

This theme addresses environmental challenges by integrating zero-waste principles and sustainable mobility practices to reduce pollution and minimize harm to ecosystems. A key focus is on the impact of waste, particularly on marine environments, where improper waste management threatens biodiversity.

Involved learners will explore strategies for waste reduction, including segregation, recycling, and composting, to implement effective zero-waste practices in tourism and hospitality. Sustainable transportation is highlighted as a critical component, promoting eco-friendly mobility options for tourism and leisure activities to reduce carbon footprints and encourage cleaner travel habits.

LEARNING OBJECTIVES

- 1. To build learner's understanding for the environmental impact of waste particularly on marine ecosystems, and the importance of zero-waste practices;
- 2. To familiarize learners with efficient waste management strategies, such as recycling, composting, and waste segregation, within tourism operations;
- 3. To explain the principles of sustainable transportation and its relevance to reducing carbon footprints in tourism and leisure activities;
- 4. To build learner's skills to identify and dispose non-hazardous waste;
- 5. To strengthen learners' skills in evaluating and selecting sustainable transportation means for tourism-related activities.

EXPECTED LEARNING OUTCOMES

Knowledge

- ✓ Understand the environmental impact of waste, particularly on marine ecosystems, and the importance of zero-waste practices.
- ✓ Explain waste management strategies, such as recycling, composting, and waste segregation, within tourism operations.
- ✓ Understand the principles of sustainable transportation and its relevance to reducing carbon footprints in tourism and leisure activities.

Skills

- ✓ Dispose non-hazardous waste or debis;
- ✓ Effectively identify and implement practical waste management methods in hospitality and tourism settings.
- ✓ Integrate zero-waste principles and sustainable practices into daily operations.
- ✓ Ability to evaluate and select eco-friendly transportation options for personal and professional use.

Competence

- ✓ Implement and promote sustainable waste management strategies tailored to specific tourism operations.
- ✓ Lead efforts in promoting waste management and sustainable transportation.
- ✓ Exhibit a commitment to sustainability by continuously evaluating and adapting activities to reduce environmental harm

TRAINING METHODOLOGY

TOPIC		ı	HOURS	
Zero-waste principles and practices (waste segregation, recycling, and composting) in tourism to minimize environmental harm	Theory	Practical training	Assessment	Individual learning
Sustainable transportation for tourism leisure– encouraging environmentally friendly mobility options for both personal and professional use, including tourism and leisure activities		Craining		
Integrating Sustainable Practices in Tourism Operations	60 min	45 min	30 min	90 min

Recommended workload: 3 academic hours (135 minutes), devoted to guided training (theory and practice) and assessment activities. Self-learning is excluded from total workload, and its duration depends on the learner's pace.

THEME CODE T 05

THEME TITLE

EMPOWERING OTHERS TO ADOPT SUSTAINABLE PRACTICES THROUGH EFFECTIVE COMMUNICATION AND LEADERSHIP

ESCO REFERENCE

ENGAGE OTHERS IN ENVIRONMENTALLY-FRIENDLY BEHAVIOURS

THEME OVERVIEW

This theme helps learners to build the skills needed to engage others in adopting environmentally friendly behaviours, with a particular focus on their application in the tourism sector specifics.

The theme provides learners with a deeper understanding of the importance of personal example and the proper use of effective communication to inspire sustainable behaviour in others. It encourages learners to take a proactive role in both personal and professional settings to motivate colleagues, guests, and communities to adopt environmentally conscious actions and habits, thereby strengthening learners' leadership and influencing skills for positive change in sustainability. Finally, the theme equips learners with the skills to identify, analyse and use information for advocacy, awareness-raising and practical guidance in tourism aimed at inspiring enthusiasm for nature and promoting environmentally friendly behaviour.

The theme contributes to strengthening of digital, communication and leadership skills, while encouraging critical and creative thinking.

LEARNING OBJECTIVES

- 1. To introduce learners to basic models and approaches for influencing behavior, explaining the elements of the behavioral model and emphasizing the importance of personal example, leadership, and communication in engaging others in environmentally friendly behavior;
- 2. To familiarize learners with practical strategies and tools specific to the tourism sector that can be used to inform and inspire others to go green;
- 3. To enhance learners' communication and motivational skills and their ability to identify, select, and use appropriate communication techniques and approaches for sustainability advocacy in various situations;
- 4. To strengthen learners' digital and presentation skills, in particular those for creating artistic, visual or instructive materials;
- 5. To cultivate a positive attitude of active engagement, communication, and cooperation to inspire and engage others in environmentally friendly behaviours.

EXPECTED LEARNING	G OUTCOMES
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Knowledge

- ✓ Describe the elements of the behavioral model and understand the role of personal behavior and communication for influencing the others:
- techniques and digital tools and understand the benefits of their use in different situations;
- ✓ Comprehend the principles of leadership, example personal and effective communication in motivating sustainable behavior, including strategies for influencing and persuading others.

Skills

- ✓ Gather, organize, and deliver diverse types of information in different formats to promote environmentally friendly behaviors;
- Select appropriate and apply ✓ Gain knowledge of various communication communication techniques tailored to specific audiences and contexts to advocate for sustainability;
 - ✓ Effectively use digital tools (e.g., presentation software, online platforms) for creating artistic, visual or instructive materials.

Competence

- for sustainable ✓ Advocate practices effectively in professional and community environments;
- ✓ Influence attitudes and behaviors toward sustainability, persuasive using communication, personal example and motivational techniques;
- ✓ Collaborate with others to foster a culture of environmental responsibility in their workplace and broader community;
- ✓ Convince and inspire action through clear, confident, and impactful communication.

TRAINING METHODOLOGY TOPIC **HOURS** Influence - levels, models and approaches. Behavioural influence. Personal example and Individual leadership. learning Communication, awareness raising and advocacy for sustainability - effective ways to inspire others to go green. 45 min 30 min 60 min 90 min Influencing in practice - a cycle of a wide range of activities.

devoted to guided training (theory and practice) and assessment

THEME CODE T 06 THEME TITLE

CULTIVATING ETHICAL AWARENESS TO EVALUATE AND REDUCE THE ENVIRONMENTAL IMPACT OF PERSONAL AND WORKPLACE BEHAVIORS

ESCO REFERENCE

EVALUATE ENVIRONMENTAL IMPACT OF PERSONAL BEHAVIOUR

THEME OVERVIEW

This theme helps learners to build the skills needed to evaluate environmental impact of personal behavior both in their personal and working everyday life.

The theme emphasizes the critical role of individuals in contributing to global efforts for sustainability. By exploring the key factors influencing contemporary lifestyles and consumption patterns, and discussing the significance of individual choices and actions, the theme seeks to foster environmental awareness among learners. It encourages learners to evaluate their environmental impact (both positive and negative) and, based on this assessment, to identify options for editing personal lifestyle choices and making more sustainable decisions that reduce the environmental impact of personal and workplace behaviors.

This topic supports strengthening of planning, decision-making, analytical thinking, and self-evaluation skills.

LEARNING OBJECTIVES

1.To raise learners' awareness about the role and significance of personal choices and individual actions in achieving sustainable development by explaining the relationship between groups and individuals, common group processes (like conformism, group influence and group interdependence), and barriers to independent behavior;

- 2. To familiarize learners with key factors influencing the lifestyle and consumption patterns of modern individuals, while fostering awareness of the (quantitative and qualitative) environmental impact of personal and workplace behaviors;
- 3. To outline options for editing own lifestyle and encourage learners to take sustainable decisions in their personal and professional lives to minimize their environmental impact;
- 4. To develop learners' skills in self-assessment, with a focus on assessing the impact of personal and workplace behavior on the environment;
- 5. To cultivate ethical awareness to evaluate and reduce the environmental impact of personal and professional behaviour.

EXPECTED LEARNING OUTCOMES

Knowledge

- ✓ Understands the role and importance of individual choices and actions in achieving sustainable development;
- ✓ Explains the relationship between groups and individuals and recognize common group processes and barriers to self-directed behavior;
- ✓ Understands how people's lifestyle and consumption choices affect sustainability and environmental resilience:
- ✓ Identifies actions that can be taken to modify one's personal life and workplace behavior to reduce harmful environmental impacts.

Editing life-style choices: Sustainable decision-making in personal life and on the workplace

attitudes

Skills

- ✓ Overcomes barriers to independent behavior within a group and makes considered individual decisions and actions for sustainability;
- ✓ Assess the environmental impact of personal behavior and apply choice-editing framework for just and sustainable transitions;
- ✓ Develop solutions for harmful behavior;

TRAINING METHODOLOGY

✓ Evaluate and select sustainable alternatives to traditional practices.

Competence

- ✓ Personal development through lifelong learning and lifestyle changes;
- ✓ Decision making and strategical planning of own lifestyle, consumption choices and behavior in personal and professional context to reduce environmental impact;
- ✓ Protects the environment by taking ongoing steps to edit personal and workplace behaviors toward sustainability.

TOPIC HOURS Sustainability and the role of individual action. Individual and Collective (group) values and Individual learning Factors shaping lifestyles and consumption. Measuring the impact of individual actions

60 min

30 min

90 min

45 min

HOW DOES THE SUGGESTED TRANS4GREEN TRAINING MEETS THE IDENTIFIED NEEDS?

The TRANS4GREEN training program meets crucial needs in 3 key areas:

1

Enhancing Sustainability in the Tourism Industry

As highlighted in previous sections, the tourism sector faces increasing legislative requirements and consumer demand for sustainable practices. However. tourism businesses struggle with adopting eco-friendly solutions, often due to a lack workforce skills in implementing sustainability initiatives.

The TRANS4GREEN learning addresses these challenges by:

- Developing a sustainability mindset- fostering the right attitudes toward nature and equipping workers with the critical thinking and behavioral skills needed to adapt or implement sustainability standards, processes and services in tourism protect that ecosystems and biodiversity;
- Providing hands-on training not only equipping tourism workers with green skills but also demonstrating how to apply them effectively in the workplace;
- Encouraging active participation enabling tourism professionals to contribute more effectively to the industry's transition toward greater sustainability.

2

Improving Employability & Upskilling needs

The transition to digital and green economies is changing the skills demanded in the labor market and societies (OECD, 2022). Workers must be equipped with the right skills to benefit from the employment opportunities emerging from the green economy. Tourism is a key employer of youth, migrants, and people with disabilities, many of whom face limited access to quality jobs and career progression due to insufficient skill-set and experience.

The TRANS4GREEN learning addresses these challenges by:

- Developing transversal skills – providing training in highly sought-after, transferable skills that are valuable across multiple industries.
- Focusing on green skills aligning training with sustainability as a core 21stcentury trend, making these skills an essential for enhancing asset employability and greater unlocking opportunities in the green economy.

3

Relevance and Quality of Education

Education have systems struggled to keep pace with the rapid rise of the green economy. upskilling Innovative reskilling initiatives are essential enhance quality adult learning, especially for at-risk socio-economic groups those vulnerable to labor market changes. Promoting effective teaching methods is critical to boost participation, as many adults encounter barriers to education and training. Encouraging effective and innovative teaching and learning methods is crucial to increasing participation, many adults face barriers that

The TRANS4GREEN program addresses challenges by:

prevent them from engaging in

education and training.

- Offering flexible, adaptable learning for VET, workbased training and LLL.
- **Developing diverse skills**, including foundational, digital, and social-emotional skills for engagement in the digital and green economies.
- Providing responsive training with a modular approach to accommodate time constraints and barriers.
- Utilizing practical, innovative teaching methods, including scenario-based training that enhances education's quality and effectiveness by applying skills in real-life contexts.

WHAT ARE THE GENERAL LEARNING OUTCOMES FOR THE TRANS4GREEN TRAINING?

The **general learning outcomes** of the TRANS4GREEN training program focus on empowering learners with the knowledge, skills, and attitudes needed to drive sustainability in the tourism sector. Involved learners will develop the ability to assess and mitigate environmental impacts in tourism settings, implement sustainable practices, and promote eco-friendly behaviors. They will gain a deep understanding of the interconnection between tourism activities and environmental sustainability, ensuring they can effectively foster biodiversity, reduce resource consumption and pollution, and engage stakeholders in green initiatives. These competencies equip graduates to actively contribute to the industry's transition toward sustainability.

By immersing the learners in innovative and digitally-based training activities, the TRANS4GREEN program strengthens learner's digital skills that are also applicable across different sectors.

Additionally, the program fosters **core transversal skills**, such as **learning to learn**, **communication**, **teamwork**, **leadership** and **problem-solving**. These competencies are essential for enhancing employability, enabling workers to adapt to change, solve complex problems, and collaborate effectively—ensuring their ability to thrive in a dynamic, sustainability-driven economy. Finally, the TRANS4GREEN program promotes mindful and environmentally responsible behavior, encouraging learners to integrate eco-friendly practices into their everyday actions.



LIAISON OF TRANS4GREEN TRAINING WITH THE NATIONAL VET REGULATIONS

The TRANS4GREEN Methodology is designed in alignment with the VET regulations of partner countries—Bulgaria, Turkey, and Lithuania—ensuring compliance with their specific educational standards, policies, and legal frameworks.

By adhering to these regulations, TRANS4GREEN enables seamless integration into Initial Vocational Education and Training (IVET), Continuing Vocational Education and Training (CVET), and Lifelong Learning (LLL) programs. This adaptability ensures that learners across different education and career stages can benefit from sustainability-focused training tailored to their professional development needs.

BULGARIA

In Bulgaria, vocational training in tourism is structured through various educational and qualification programs designed to prepare professionals for different levels in the sector. Formal education is provided at both secondary and tertiary levels, while a range of non-formal courses and work-based learning opportunities support upskilling and reskilling for individuals already in the labor market or seeking employment in tourism.

Bulgarian legislation mandates the integration of green content into existing subjects at all levels of education (Ordinance No. 13, 2016, amended in 2018). However, there is no specific legislation governing green transition skills within VET and apprenticeships (work-based learning). As a result, these skills are not comprehensively included in the State Educational Standards for vocational qualifications or in apprenticeship curricula.

Bulgarian VET curricula are typically developed on a modular basis, where each package of modules ensures completion of a specific professional qualification level. Curricula and syllabuses are structured for each module separately.

Under Bulgarian legislation, green skills can be integrated into VET curricula in several ways, provided they align with the broader learning objectives of the program. This can be achieved through:

- Incorporating new themes related to green skills, upskilling, or reskilling.
- Expanding or redesigning existing subjects to include green competencies.
- Proposing additional or alternative modules, courses, or themes focused on green skills.

LITHUANIA

In Lithuania, the integration of green transversal skills within the Vocational Education and Training (VET) system aligns with the country's educational policies aimed at fostering sustainable development. The Lithuanian VET framework is governed by the Law on Vocational Education and Training, which emphasizes the importance of equipping learners with competencies that meet the demands of the modern labor market, including environmental sustainability.

The National Qualifications Framework (NQF) in Lithuania, plays a pivotal role in standardizing competencies across various educational levels and ensuring the recognition of green skills within formal qualifications. The integration of TRANS4GREEN training into the Lithuanian VET system involves embedding these green skills into existing curricula, ensuring that they are aligned with national standards and contribute to both initial vocational education and lifelong learning pathways.

Additionally, the National Agency for Education oversees the development of qualifications and ensures that VET programs, including those focusing on green skills, are in line with the country's broader educational and economic strategies.

TÜRKIYE

The suggested TRANS4GREEN training program aligns with Türkiye's Vocational Education and Training (VET) regulations, which support the integration of green skills into education. The key legal frameworks governing this process include:

- 1. The Basic Law of National Education (Law No. 1739) emphasizes environmental awareness and human rights education, providing a foundation for embedding green skills into VET curricula.
- 2. The Vocational Education Law (Law No. 3308) facilitates collaboration between schools and businesses, enabling practical applications of sector-specific green skills.
- 3. The Environmental Law (Law No. 2872) promotes sustainable practices, which can be integrated into tourism education.
- 4. The Lifelong Learning Strategy Document and Action Plan (2018–2023) highlights employability and environmental awareness, aligning with TRANS4GREEN's objectives.

Türkiye's National Qualifications Framework (NQF) allows green skills to be included as cross-cutting competencies in tourism-focused VET programs. Vocational schools and apprenticeships can introduce specialized modules, such as:

- Sustainable Tourism Practices;
- Eco-Friendly Business Strategies.

Türkiye also emphasizes public-private partnerships and green certification programs, which complement TRANS4GREEN's objectives. These frameworks provide a strong foundation for integrating sustainability into VET, advancing both local and global sustainable tourism efforts.

TRANS4GREEN TRAINING SUGGESTED CONTENT



THEME TITLE

SUSTAINABILITY AND ENVIRONMENTAL RESPONSIBILITY IN TOURISM

ESCO REFERENCE

Not relevant

THEME OVERVIEW

This theme explores the core principles of sustainability and their application within the tourism sector. It begins with an introduction to sustainability, focusing on its fundamental principles and how they intersect with environmental, economic, and social dimensions. The theme delves into the role of sustainable development goals (SDGs) in guiding global environmental protection efforts and the importance of adopting these goals in tourism practices. Special emphasis is placed on efficient use of natural resources and the concept of a circular economy, which promotes sustainability through reuse, recycling, and minimizing waste.

Further, the theme highlights the critical role of tourism in sustainable development, addressing the challenges the sector faces in balancing economic growth with environmental protection and social well-being. Practical aspects of environmental protection in tourism are explored, with strategies for integrating sustainability into tourism operations. Learners will gain a deeper understanding of how tourism businesses can mitigate their environmental impact while fostering long-term positive outcomes for local communities and ecosystems.

- 1. To build learners' understanding of the environmental impact of tourism, environmental policies in tourism sector and the fundamental principles of sustainability and their application in tourism practices, with a focus on environmental, economic, and social dimensions.
- 2. To provide learners with the knowledge needed to recognize the importance of sustainable development goals (SDGs) in guiding environmental protection efforts within the tourism industry.
- 3. To equip learners with the ability to develop strategies for the efficient use of natural resources and the application of circular economy principles in tourism operations.
- 4. To build learners' skills to analyze the challenges and opportunities of integrating sustainability into tourism development, balancing economic, environmental, and social factors.
- 5. To strengthen learners' capacity to identify and apply practical strategies for environmental protection in tourism, ensuring sustainable business practices that benefit the environment and local communities.

EXPECTED LEARNING OUTCOMES

Knowledge

- ✓ Understand the environmental impact of tourism and tourism sector policies for environmental protection;
- ✓ Understand key principles of sustainability and how they are applied within the tourism sector, including the environmental, economic, and social aspects;
- ✓ Recognize the role of the Sustainable Development Goals (SDGs) in guiding sustainability practices and environmental protection within tourism;
- ✓ Comprehend the concept of circular economy and how it contributes to resource efficiency and waste reduction in tourism operations.

Skills

- ✓ Adapt to change in tourism sector and shift ✓ Demonstrate competence in implementing to green economy;
- ✓ Implement environmental action plans and sustainable tourism practices, including ethical sourcing, biodiversity conservation, and minimizing environmental impact in tourism enterprises;
- ✓ Apply effective techniques to ensure efficient use of natural resources in tourism businesses. focusing on sustainability;
- ✓ Develop for integrating strategies sustainability into tourism operations, balancing economic arowth with environmental and social considerations.

Competence

- sustainable tourism operations, reducing environmental impacts while benefiting local communities:
- ✓ Lead and inspire sustainable initiatives within tourism organizations, fostering the adoption of eco-friendly practices among colleagues and stakeholders:
- ✓ Assess the environmental impact of tourism activities and develop strategies to mitigate these impacts for long-term sustainability.

TRAINING METHODOLOGY				
TOPIC	HOURS			
Introduction to sustainability. Principles of sustainability	Theory	Practical training	Assessment	Individual learning
Sustainable development goals, economic growth and strategies of environmental protection				
Efficient use of natural resources in the economy. Circular Economy	45 min	60 min	30 min	90 min
The role and challenges of environmental protection in tourism			cademic hours (135 r	**

THEME TITLE PROMOTING SUSTAINABLE PRACTICES IN TOURISM ENTERPRISES THROUGH ETHICAL SOURCING, BIODIVERSITY CONSERVATION, AND ENVIRONMENTALLY RESPONSIBLE OPERATIONS

ESCO REFERENCE

ADOPT WAYS TO FOSTER BIODIVERSITY AND ANIMAL WELFARE

THEME OVERVIEW

This theme emphasizes the integration of sustainable practices in tourism enterprises, focusing on ethical sourcing, biodiversity conservation, and environmentally responsible operations. It explores the significant role that natural resources play in the tourism industry and how these resources can be used sustainably to minimize negative environmental impacts. By prioritizing local and ethical sourcing, tourism businesses can reduce their carbon footprint and support biodiversity, thus contributing to the health of local ecosystems.

The theme also delves into biodiversity-friendly operations, where sustainable practices are applied in accommodation management, restaurant operations, and tour activities to protect natural ecosystems and promote animal welfare. Additionally, it highlights the importance of personal and professional choices in adopting sustainable behaviors within daily operations and decision-making processes, such as sustainable menu planning. Practical aspects, including the adoption of sustainable food habits, are covered to provide actionable insights for both individuals and enterprises in the tourism sector.

- 1.Understand the relationship between tourism and natural resources, and how sustainable use can minimize environmental impact.
- 2. Identify and implement local and ethical sourcing practices that reduce environmental impact and support biodiversity in tourism enterprises.
- 3. Develop and apply biodiversity-friendly operational strategies in accommodation, restaurants, and tour activities to protect ecosystems and promote animal welfare.
- 4. Encourage and promote sustainable behaviors within tourism enterprises by making informed personal and professional choices.
- 5. Integrate sustainable food habits into tourism operations to enhance environmental responsibility and reduce the ecological footprint of tourism activities.

EXDECTED	LEVDNING	OUTCOMES
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Knowledge

- ✓ Understand the relationship between tourism and natural resources, and how their sustainable use can minimize environmental impact.
- ✓ Recognize local and ethical sourcing practices that reduce environmental impact and support biodiversity in tourism enterprises.
 ✓ Understand biodiversity-friendly operational strategies in accommodation, restaurants, and

tour activities to protect ecosystems and

promote animal welfare.

Skills

- ✓ Develop and implement local and ethical sourcing practices in tourism operations to reduce environmental impact.
- ✓ Make decisions regarding the animal's welfare and apply biodiversity-friendly operational strategies in various tourism services, ensuring the protection of ecosystems and animal welfare.
- ✓ Promote sustainable behaviors within tourism enterprises by influencing daily operational and decision-making processes.

Competence

- ✓ Demonstrate the ability to manage tourism enterprises sustainably, integrating practices that reduce environmental impact and support biodiversity.
- ✓ Lead efforts in adopting ethical sourcing and sustainable practices in tourism operations to contribute to environmental responsibility.
- ✓ Evaluate and enhance sustainable food habits in tourism enterprises, reducing the ecological footprint and promoting sustainability.

TRAINING METHODOLOGY

Tourism and nature – natural resources being used in the tourism industry Local and ethical sourcing – prioritizing local products and ethical ingredients in tourism activities to reduce the environmental impact and support biodiversity Biodiversity-friendly operations – implementing sustainable practices in accommodation management, restaurant operations and tour activities that protect natural ecosystems and animal welfare Personal and professional choices – encouraging individuals and enterprises in tourism to adopt sustainable behaviors in daily operations and decision-making (sustainable menu, sustainable food habits)

HOURS



Recommended workload: 3 academic hours (135 minutes), devoted to guided training (theory and practice) and assessment activities. Self-learning is excluded from total workload, and its duration depends on the learner's pace.

THEME TITLE

ENCOURAGING SUSTAINABLE CONSUMPTION AND RESOURCE EFFICIENCY TO MINIMIZE ENVIRONMENTAL IMPACT

ESCO REFERENCE

ADOPT WAYS TO REDUCE NEGATIVE IMPACT OF CONSUMPTION

THEME OVERVIEW

This theme focuses on fostering sustainable consumption patterns and improving resource efficiency in the tourism sector to minimize environmental impact. By integrating principles of sustainability into daily operations, it aims to promote ethical and mindful consumption among individuals and organizations. Key aspects include reducing waste, optimizing the use of natural resources, and encouraging environmentally conscious practices in personal and professional contexts.

The theme also highlights the importance of evaluating and understanding the environmental consequences of consumption habits, empowering tourism professionals and stakeholders to make informed decisions that support long-term sustainability goals. Through practical tools and education, this theme seeks to drive positive behavioral changes and instill a culture of responsibility within the industry, aligning with global environmental and green agenda initiatives.

- 1. To enhance learners' understanding of sustainable consumption and resource efficiency for reducing environmental impact;
- 2. To expand learners' awareness of environmental footprint and consequences of resource consumption and (food and plastic) waste generation;
- 3. To equip learners with the necessary skills to identify and implement resource efficiency strategies in personal and professional contexts and promote sustainable practices;
- 4. To build learners' capacity to adapt to change and perform services in a flexible manner and promoting sustainable alternatives to traditional practices;
- 5. To strengthen learner's competences to develop and implement environmentally sustainable practices at the workplace.

EXPECTED LEARNING OUTCOM	ES	
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Knowledge

- ✓ Understand environmental impact of tourism and the need of applying the principles of sustainable consumption for reducing environmental impact.
- ✓ Explain waste reduction techniques, including alternatives to single-use plastics and food waste management.
- ✓ Identify key resource efficiency strategies in personal and professional contexts, including energy, water, and material conservation.
- ✓ Recognize the environmental consequences of overconsumption and the benefits of mindful purchasing and shared resource use.

Skills

- ✓ Perform services in a flexible way/ develop solutions to avoid single-use plastics and food waste and promoting sustainable alternatives to traditional practices.
- ✓ Develop strategies to avoid the use of single-use plastics and food waste.
- ✓ Apply practices for sustainable resource management, including energy efficiency and and food waste management.
- ✓ Minimize water and energy consumption.

Competence

- ✓ Take responsibility for minimizing the environmental impact of personal and professional actions through sustainable decision-making.
- ✓ Make informed choices for sustainable consumption and lifestyles.
- ✓ Evaluate and enhance resource efficient and waste reduction practices in the workplace.
- ✓ Commit to develop solutions fo environmentally harmful behavior.

TOPIC TOPIC Principles of Sustainable Consumption and Resource Efficiency Waste Management and Alternatives to Overconsumption Behavioral Change for Long-Term Sustainability TOPIC HOURS Theory Practical training Assessment londividual learning 60 min 45 min 30 min 90 min

Recommended workload: 3 academic hours (135 minutes), devoted to guided training (theory and practice) and assessment activities. Self-learning is excluded from total workload, and its duration depends on the learner's pace.

THEME TITLE

ADVANCING ZERO-WASTE PRACTICES AND SUSTAINABLE MOBILITY TO PROTECT THE ENVIRONMENT

ESCO REFERENCE

ADOPT WAYS TO REDUCE POLLUTION

THEME OVERVIEW

This theme addresses environmental challenges by integrating zero-waste principles and sustainable mobility practices to reduce pollution and minimize harm to ecosystems. A key focus is on the impact of waste, particularly on marine environments, where improper waste management threatens biodiversity.

Involved learners will explore strategies for waste reduction, including segregation, recycling, and composting, to implement effective zero-waste practices in tourism and hospitality. Sustainable transportation is highlighted as a critical component, promoting eco-friendly mobility options for tourism and leisure activities to reduce carbon footprints and encourage cleaner travel habits.

- 1. To build learner's understanding for the environmental impact of waste particularly on marine ecosystems, and the importance of zero-waste practices;
- 2. To familiarize learners with efficient waste management strategies, such as recycling, composting, and waste segregation, within tourism operations;
- 3. To explain the principles of sustainable transportation and its relevance to reducing carbon footprints in tourism and leisure activities;
- 4. To build learner's skills to identify and dispose non-hazardous waste;
- 5. To strengthen learners' skills in evaluating and selecting sustainable transportation means for tourism-related activities.

EXPECTED LEARNING OUTCOMES

Knowledge

- ✓ Understand the environmental impact of waste, particularly on marine ecosystems, and the importance of zero-waste practices.
- ✓ Explain waste management strategies, such as recycling, composting, and waste segregation, within tourism operations.
- ✓ Understand the principles of sustainable transportation and its relevance to reducing carbon footprints in tourism and leisure activities.

Skills

- ✓ Dispose non-hazardous waste or debis;
- ✓ Effectively identify and implement practical waste management methods in hospitality and tourism settings.
- ✓ Integrate zero-waste principles and sustainable practices into daily operations.
- ✓ Ability to evaluate and select eco-friendly transportation options for personal and professional use.

Competence

- ✓ Implement and promote sustainable waste management strategies tailored to specific tourism operations.
- ✓ Lead efforts in promoting waste management and sustainable transportation.
- ✓ Exhibit a commitment to sustainability by continuously evaluating and adapting activities to reduce environmental harm

TRAINING METHODOLOGY

TOPIC	HOURS			
Zero-waste principles and practices (waste segregation, recycling, and composting) in tourism to minimize environmental harm	Theory	Practical training	Assessment	Individual learning
Sustainable transportation for tourism leisure– encouraging environmentally friendly mobility options for both personal and professional use, including tourism and leisure activities		Craining		
Integrating Sustainable Practices in Tourism Operations	60 min	45 min	30 min	90 min

Recommended workload: 3 academic hours (135 minutes), devoted to guided training (theory and practice) and assessment activities. Self-learning is excluded from total workload, and its duration depends on the learner's pace.

THEME TITLE

EMPOWERING OTHERS TO ADOPT SUSTAINABLE PRACTICES THROUGH EFFECTIVE COMMUNICATION AND LEADERSHIP

ESCO REFERENCE

ENGAGE OTHERS IN ENVIRONMENTALLY-FRIENDLY BEHAVIOURS

THEME OVERVIEW

This theme helps learners to build the skills needed to engage others in adopting environmentally friendly behaviours, with a particular focus on their application in the tourism sector specifics.

The theme provides learners with a deeper understanding of the importance of personal example and the proper use of effective communication to inspire sustainable behaviour in others. It encourages learners to take a proactive role in both personal and professional settings to motivate colleagues, guests, and communities to adopt environmentally conscious actions and habits, thereby strengthening learners' leadership and influencing skills for positive change in sustainability. Finally, the theme equips learners with the skills to identify, analyse and use information for advocacy, awareness-raising and practical guidance in tourism aimed at inspiring enthusiasm for nature and promoting environmentally friendly behaviour.

The theme contributes to strengthening of digital, communication and leadership skills, while encouraging critical and creative thinking.

- 1. To introduce learners to basic models and approaches for influencing behavior, explaining the elements of the behavioral model and emphasizing the importance of personal example, leadership, and communication in engaging others in environmentally friendly behavior;
- 2. To familiarize learners with practical strategies and tools specific to the tourism sector that can be used to inform and inspire others to go green;
- 3. To enhance learners' communication and motivational skills and their ability to identify, select, and use appropriate communication techniques and approaches for sustainability advocacy in various situations;
- 4. To strengthen learners' digital and presentation skills, in particular those for creating artistic, visual or instructive materials;
- 5. To cultivate a positive attitude of active engagement, communication, and cooperation to inspire and engage others in environmentally friendly behaviours.

EXPECTED LEARNING	G OUTCOMES
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Knowledge

- ✓ Describe the elements of the behavioral model and understand the role of personal behavior and communication for influencing the others:
- techniques and digital tools and understand the benefits of their use in different situations;
- ✓ Comprehend the principles of leadership, example personal and effective communication in motivating sustainable behavior, including strategies for influencing and persuading others.

Skills

- ✓ Gather, organize, and deliver diverse types of information in different formats to promote environmentally friendly behaviors;
- Select appropriate and apply ✓ Gain knowledge of various communication communication techniques tailored to specific audiences and contexts to advocate for sustainability;
 - ✓ Effectively use digital tools (e.g., presentation software, online platforms) for creating artistic, visual or instructive materials.

Competence

- for sustainable ✓ Advocate practices effectively in professional and community environments;
- ✓ Influence attitudes and behaviors toward sustainability, persuasive using communication, personal example and motivational techniques;
- ✓ Collaborate with others to foster a culture of environmental responsibility in their workplace and broader community;
- ✓ Convince and inspire action through clear, confident, and impactful communication.

TRAINING METHODOLOGY TOPIC **HOURS** Influence - levels, models and approaches. Behavioural influence. Personal example and Individual leadership. learning Communication, awareness raising and advocacy for sustainability - effective ways to inspire others to go green. 45 min 30 min 60 min 90 min Influencing in practice - a cycle of a wide range of activities.

devoted to guided training (theory and practice) and assessment

THEME TITLE

CULTIVATING ETHICAL AWARENESS TO EVALUATE AND REDUCE THE ENVIRONMENTAL IMPACT OF PERSONAL AND WORKPLACE BEHAVIORS

ESCO REFERENCE

EVALUATE ENVIRONMENTAL IMPACT OF PERSONAL BEHAVIOUR

THEME OVERVIEW

This theme helps learners to build the skills needed to evaluate environmental impact of personal behavior both in their personal and working everyday life.

The theme emphasizes the critical role of individuals in contributing to global efforts for sustainability. By exploring the key factors influencing contemporary lifestyles and consumption patterns, and discussing the significance of individual choices and actions, the theme seeks to foster environmental awareness among learners. It encourages learners to evaluate their environmental impact (both positive and negative) and, based on this assessment, to identify options for editing personal lifestyle choices and making more sustainable decisions that reduce the environmental impact of personal and workplace behaviors.

This topic supports strengthening of planning, decision-making, analytical thinking, and self-evaluation skills.

LEARNING OBJECTIVES

1.To raise learners' awareness about the role and significance of personal choices and individual actions in achieving sustainable development by explaining the relationship between groups and individuals, common group processes (like conformism, group influence and group interdependence), and barriers to independent behavior;

- 2. To familiarize learners with key factors influencing the lifestyle and consumption patterns of modern individuals, while fostering awareness of the (quantitative and qualitative) environmental impact of personal and workplace behaviors;
- 3. To outline options for editing own lifestyle and encourage learners to take sustainable decisions in their personal and professional lives to minimize their environmental impact;
- 4. To develop learners' skills in self-assessment, with a focus on assessing the impact of personal and workplace behavior on the environment;
- 5. To cultivate ethical awareness to evaluate and reduce the environmental impact of personal and professional behaviour.

EXPECTED LEARNING OUTCOMES

Knowledge

- ✓ Understands the role and importance of individual choices and actions in achieving sustainable development;
- ✓ Explains the relationship between groups and individuals and recognize common group processes and barriers to self-directed behavior;
- ✓ Understands how people's lifestyle and consumption choices affect sustainability and environmental resilience:
- ✓ Identifies actions that can be taken to modify one's personal life and workplace behavior to reduce harmful environmental impacts.

Editing life-style choices: Sustainable decision-making in personal life and on the workplace

attitudes

Skills

- ✓ Overcomes barriers to independent behavior within a group and makes considered individual decisions and actions for sustainability;
- ✓ Assess the environmental impact of personal behavior and apply choice-editing framework for just and sustainable transitions;
- ✓ Develop solutions for harmful behavior;

TRAINING METHODOLOGY

✓ Evaluate and select sustainable alternatives to traditional practices.

Competence

- ✓ Personal development through lifelong learning and lifestyle changes;
- ✓ Decision making and strategical planning of own lifestyle, consumption choices and behavior in personal and professional context to reduce environmental impact;
- ✓ Protects the environment by taking ongoing steps to edit personal and workplace behaviors toward sustainability.

TOPIC HOURS Sustainability and the role of individual action. Individual and Collective (group) values and Individual learning Factors shaping lifestyles and consumption. Measuring the impact of individual actions

60 min

30 min

90 min

45 min

PEDAGOGICAL APPROACH



INSTRUCTIONAL STRATEGY

The TRANS4GREEN training programme exploits the advantages of the theme based instructional strategy that connects different subjects under a common theme, fostering a holistic understanding and emphasizing interdisciplinary learning. On one hand, this approach facilitates the seamless integration of the TRANS4GREEN themes into the backbone subjects of the chosen tourism VET curricula. On the other hand, by engaging learners with a theme through various activities, it creates a continuous learning experience.

The selected approach complies with the recommendations of OECD's paper <u>Skills Summit 2022</u>: <u>Strengthening Skills for Equity and Sustainability</u> for improvement of the quality and accessibility of VET.

PEDAGOGICAL APPROACH AND TRAINING MATERIALS

Further, the TRANS4GREEN training program adopts a **learner-centered**, **practice-oriented pedagogical approach** that integrates active learning methods to effectively develop green transversal skills. Active learning engages learners by encouraging participation in the learning process rather than passive absorption of information. It involves **collaborative problem-solving**, **discussions**, **debates**, **critical analysis**, **and hands-on activities**. Instructors act as facilitators rather than lecturers, guiding learners as they explore and apply concepts. Research indicates that effective active learning methods combine hands-on, minds-on, and hearts-on approaches, fostering not only cognitive engagement but also emotional and social support.

Although implementing active learning requires effort and creativity, it can be seamlessly integrated into existing courses through a <u>structured step-by-step</u> approach to enhance engagement and learning outcomes.

Different learning contexts—such as class size, group dynamics, synchronous or asynchronous learning, and online or in-person settings—offer various opportunities for applying active learning methodologies. The TRANS4GREEN training program recognizes that successfully solving a problem, as emphasized by active learning methods, does not necessarily lead to meaningful learning. True learning occurs when learners grasp and internalize the underlying unifying theory.

Therefore, to maximize the benefits of active learning, the TRANS4GREEN program embeds theoretical concepts in engaging presentations to clarify key ideas and demonstrate their interconnectedness. These concepts are then contextualized through case studies and problem-based learning (PBL) that highlight their application in real-world professional settings. Finally, suggested **scenario-based learning cases** provide a safe and immersive environment where learners apply their knowledge to solve problems. This approach acknowledges that making mistakes, struggling with concepts, and exploring solutions are essential parts of the learning process. These methods allow learners to apply green skills in realistic settings, which is vital for the TRANS4GREEN training process.

The training program comprises of guided training (that covers the delivery of the theoretical concepts and parts of the PBL and scenario based learning) but also suggest devoting time for individual learning where learners are encouraged to further explore the theme by themselves or to work on assignments and projects.

A set of training materials (TRANS4GREEN ToolBox) are developed to support the guided delivery of the training:

- 1) Overview of the theme
- 2) Conceptual presentation
- 3) Scenario-based cases
- 4) Assignments and assessment tests.

In addition to these, in the course of conducting the training program, the organizers or instructors could also use or create:

- 1. Interactive presentations and factsheets:
- 2. Infographics and Visual Guides provided by reliable sources (such as European Environmental Agency, EU science hub, UNWTO, etc.);
- 3. Videos and or video tutorials some are suggested in Annex 1;
- 4. Government and industry reports on sustainable tourism practices, ethical sourcing, and environmental protection;
- 5. Local/regional examples of successful sustainability initiative (case study).

A wide-body of literature is provided in *Annex 2* of the current document as suggested reading to support the learner's individual learning.

All themes are designed to be suitable for delivery in variety of training modes that involve learning environments and participants needs. To exploit their possibilities, the instructors/ organizers will need computer, internet and presentation equipment.

EVALUATION AND ASSESSMENT

Since the TRANS4GREEN training program is not yet officially integrated into VET curricula, it is essential to assess and recognize learners' efforts through a structured evaluation process. To achieve this, a three-level assessment framework is recommended, based on the <u>Kirkpatrick Model</u>:

Level 1: Reaction

This initial assessment focuses on learners' engagement, perceptions, and the relevance of the training to their field of study or profession. The goal is to determine whether participants find the program engaging, useful, and applicable. This can be measured through **post-training surveys** (commonly known as "smile sheets"), where learners provide feedback on their experience, including content relevance, teaching methods, and overall satisfaction.

Level 2: Learning

At this stage, the focus is on evaluating whether learners have acquired the **intended knowledge, skills, attitudes, confidence, and commitment** to sustainable tourism practices. Learning assessments can take various forms, including:

- **Tests and quizzes** to measure theoretical knowledge.
- Portfolios, projects, and assignments to evaluate practical skills.
- Individual or collaborative tasks, ranging from brief exercises to in-depth analysis.
- Oral or written reflections to assess deeper understanding.

Assessments can be **formative** (providing feedback for improvement) or **summative** (contributing to a final evaluation). The goal is to promote a **positive learning attitude and sustainable study habits**, rather than encouraging last-minute memorization.

Level 3: Behavior

The final level assesses whether learners apply the acquired skills in real-world settings. This evaluation focuses on behavioral changes and the practical implementation of green skills in the workplace or educational environment. Tracking behavioral shifts helps determine the effectiveness of the training and highlights potential barriers to implementation, such as organizational constraints or lack of institutional support. A lack of change does not necessarily indicate ineffective training but may suggest that structural or cultural adjustments are needed to foster a sustainable learning environment.

In case, the learning takes place in working environment, the assessment may cover the final 4^{th} level – Results, where the organizations should measure the results of the training based on prior set indicators such as reduction of food waste, energy and water consumption, recycling and etc.

BRIEF GUIDE ON ASSESSMENT IMPLEMENTATION

By incorporating these assessment strategies, educators can ensure that learners not only acquire knowledge but also apply green skills in professional settings, contributing to a more sustainable tourism industry.

REACTION (LEARNER ENGAGEMENT & FEEDBACK)

- Use **surveys** or informal **discussions** to gather learner feedback on training effectiveness and relevance.
- Questions to consider:
 - 1. Did the learners find the content engaging and useful?
 - 2. Was the training applicable to their field of work or study?

LEARNING (KNOWLEDGE & SKILL ACQUISITION)

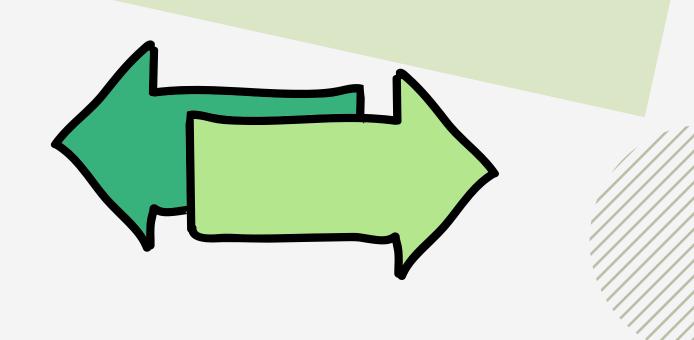
- Apply different assessment techniques based on learning objectives:
 - 1. Quizzes and Tests to measure theoretical understanding.
 - 2. **Case Studies** and **Scenario-Based Tasks** to assess problem-solving skills.
 - 3. **Projects** and **Presentations** to evaluate practical application of green skills.

3

BEHAVIOR (APPLICATION IN REAL-WORLD SETTINGS)

- Track behavioral changes in learners post-training:
 - 1. **Self-reflection exercises** learners evaluate their own sustainable behaviors.
 - 2. **Workplace observations** if applicable, monitor how learners implement sustainability practices.
 - 3. **Trainer feedback** assess learners' ability to apply sustainable tourism practices.

TRANSFERABILITY OF THE TRANS4GREEN TRAINING TO DIFFERENT LEARNING CONTEXTS. ORGANIZATION OF TRAININGS ADAPTED TO DISADVANTAGED LEARNERS' NEEDS



The TRANS4GREEN training program is designed to be highly adaptable and transferable to various educational, professional, and geographical contexts.

TRANSFERABILITY OF THE TRANS4GREEN PROGRAM TO OTHER CONTEXTS

The theme-based structure, thematic approach, and focus on transversal green skills make the TRANS4GREEN training program suitable for integration into different teaching and learning contexts.

Along with its consideration within the IVET and CVET systems, the program has a wide-application potential in non-formal lifelong learning and on-the job training environments. Indeed, it will be particularly effective for adults as they learn best when learning is put into context, for example their workplace environment, and when it is practical and problem-oriented (OECD, 2022).

ADAPTABILITY ACROSS EDUCATIONAL CONTEXTS

One of the key strengths of TRANS4GREEN is its alignment with the European Skills, Competences, Qualifications, and Occupations (ESCO) framework, ensuring compatibility across different national VET curricula. The program's themes, which cover sustainability practices in tourism, can be seamlessly embedded within existing training modules in Initial VET (IVET), Continuing VET (CVET), and Lifelong Learning (LLL) programs. Additionally, its flexible assessment methodology allows educational institutions to tailor evaluation methods to their specific regulatory requirements and learning outcomes.

APPLICABILITY ACROSS INDUSTRIES

The training program is originally designed for the tourism sector and is therefore applicable to all occupations and professional fields within the industry. As previously explained, a specific focus on the job-roles of Hotel administrator, Waiter/ Bartender and Travel agent/ consultant is put within the scenario cases. However, as they are provided as downloadable and editable, the introduction of slight changes may turn them into effective resources for many other tourism jobs.

The core focus on transversal skills and the principles of sustainability — make the TRANS4GREEN programme widely applicable to other industries, including non-tourism sectors like Business and administration, ICT and others.

TRAININGS ADAPTED TO DISADVANTAGED LEARNERS' NEEDS

TRANS4GREEN recognizes that disadvantaged learners—such as those from rural areas, individuals with mild disabilities, or socio-economically challenged backgrounds, for whom the tourism sector remains a viable employment opportunity, may face unique barriers to participating in training. To ensure their full and active participation, the TRANS4GREEN training program is designed to be inclusive and accessible. The TRANS4GREEN *ToolBox* resources are available in adapted formats that address identified needs. Additionally, these resources are provided in editable versions, allowing instructors or organizers to personalize the content to suit the specific requirements of individual learners or training groups.

Furthermore, the TRANS4GREEN *Guide* provides detailed instructions for organizing training for disadvantaged learners, offering valuable resources for interested stakeholders.

KEY STEPS FOR TRANSFERRING THE METHODOLOGY TO DIFFERENT EDUCATIONAL CONTEXTS

By following these steps, the methodology can be effectively transferred and adapted to various industries and educational contexts, fostering a broader impact on sustainability education and workforce development.

IDENTIFY RELEVANT MODULES AND SETTINGS Identify the VET/ LLL courses or on-the-job training that can can benefit from the methodology; • Assess how sustainability competencies align with sectorspecific skills and workforce needs; • Ensure the such integration is compatible with national or regional education and training standards. ADAPT TO YOUR TRAINING NEEDS • Identify the modules where the training program can be integrated; • Select the implementation approach, such as standalone modules or full-course integration; • Adapt training content to address the specific challenges and opportunities of the new sector or educational setting. CUSTOMIZE CONTENT FOR TARGET AUDIENCES AND USE THE **SUPPORTING TOOLS** • Leverage the TRANS4GREEN ToolBox and TRANS4GREEN Guidelines to structure training sessions; • Modify case studies, exercises, and real-world applications to ensure relevance for different learner groups. IMPLEMENT AND ASSESS LEARNING • Ensure time and support to trainers so they can effectively familiarize with sustainability concepts and active learning strategies; • Encourage peer learning and knowledge-sharing among educators for successful methodology adoption; • Implement evaluation frameworks to track learner progress

and effectiveness of the methodology;

materials and delivery approaches.

• Gather feedback from trainers and participants to refine

ANNEXES

ANNEX 1: SUGGESTED VIDEOS AND OTHER RESOURCES

Suggested videos and Video Tutorials

- 1. The True Cost of Tourism
- 2. Sustainable Travel: A Global Movement
- 3. Videos on circular economy concepts or sustainable practices in the tourism sector (e.g., TED Talks on sustainability in travel).
- 4. YouTube video: Inspiration towards sustainable water management
- 5 .Seven Billion Dreams. One Planet. Consume with Care: https://www.youtube.com/watch?
 v=JyL58vlbvgw
- 6. How can we #beatplasticpollution?: https://www.youtube.com/watch?v=kET-I4DbohQ
- 7. What really happens to the plastic you throw away Emma Bryce (Ted-Ed): https://www.youtube.com/watch?v=_6xINyWPpB8
- 8. How microplastics affect your health: https://www.youtube.com/watch?v=aiEBEGKQp_1
- 9. YouTube video: Communicating sustainability visually &effectively (webinar Recording)
- 10. YouTube video: <u>Celebrate Environment Day: Promote sustainability and Inspire Environmental Impact</u>

Good practices

- 1. Examples of successful initiatives/ green projects that have empowered others to be more sustainable, such as https://exploreit.in/youth-empowerment-through-environmental-initiatives/
- 2. Case studies on waste reduction and resource efficiency in the hospitality industry from journals like Sustainability or Journal of Sustainable Tourism.

Other training materials

Teaching materials, such as the resources provided by Sustainable Education Hub

Useful tools resources

- 1. Footprint calculators like: https://lifestylecalculator.com/unfccc
- 2. United Nations' App Aworld
- 3. Online guidelines like WWF's <u>Measure your impact</u> or UN's <u>Actions for healthy</u> planet

ANNEX 2: SUGGESTED READINGS

- 1. Articles on consumer behavior and environmental impact (National Geographic or The Guardian).
- 2. Book: "Sustainable Tourism: Theory and Practice" by David Weaver
- 3. Book: "The Green Guide to Tourism" by Peter Jordan
- 4. Book: "The Tourism System" by Robert W. McIntosh and Charles R. Goeldner: A foundational text on tourism systems and how sustainability fits into tourism development.
- 5. Book: "Sustainable Tourism: Theory and Practice" by David A. Fennell: A comprehensive exploration of sustainable tourism practices, including ethical sourcing and environmental conservation.
- 6. Book: "The Business of Sustainable Tourism" by Sarah J. P. B. Watkiss: A guide to integrating sustainable practices into tourism enterprises, with specific examples and case studies.
- 7. Book: "Biodiversity Conservation and Sustainable Development" by W. D. S. L. Lüttge: A detailed reading on the importance of biodiversity in sustainable development, with a focus on tourism's role.
- 8. Book: "Zero Waste Home" by Bea Johnson A guide to reducing waste in everyday life.
- 9. Book: "The Responsible Tourist" by Harold Goodwin Insights into ethical and sustainable travel behaviors.
- 10. Book: "Zero Waste: Home Production and Sustainability" by Shia Su
- 11. Book: "Cradle to Cradle: Remaking the Way We Make Things" by William McDonough & Michael Braungart
- 12. Book: "Sustainable Tourism: Challenges and Solutions" by David Weaver.
- 13. Book: <u>Everyday lifestyles and Sustainability: The environmental impact of doing the same things differently</u>
- 14. Research Papers and Articles: "Tourism and the Sustainable Development Goals: From the Global to the Local"
- 15. Research Article: <u>Changing behaviour: Successful environmental programmes in the workplace</u>
- 16. Report: UN World Tourism Organization (UNWTO) Reports on Sustainable Tourism
- 17. Reports: World Travel & Tourism Council (WTTC) Sustainable Travel Reports
- 18. Report: UNWTO Sustainable Tourism Report: A global perspective on sustainable tourism practices and guidelines for businesses to follow.
- 19. Report: "Tourism for Development: Volume 1 Key Concepts and Issues" (UNWTO Report): A detailed report by the UNWTO covering the key aspects of sustainable tourism and its role in economic, environmental, and social development.
- 20. Report: "Tourism and Biodiversity" (International Union for Conservation of Nature IUCN): A report detailing the challenges and opportunities of protecting biodiversity within the tourism sector

- 21. Report "I will if you will: towards sustainable development" by Sustainable Development Commission.
- 22. Policy and Strategy Documents: "The Green Agenda for Tourism" by the European Union
- 23. Policy and Strategy Documents: "UN SDGs and Tourism: A Framework for Sustainable Tourism"
- 24. World Economic Forum: The 7 ways to sucessfuly communicate sustainability
- 25. Websites and Blogs: Global Sustainable Tourism Council (GSTC) (https://www.gstcouncil.org/) for resources and best practices in sustainable tourism
- 26. Websites and Blogs: Sustainable Travel International (<u>www.sustainabletravel.org</u>)
- 27. Website: UNWTO Sustainable Tourism (<u>https://www.unwto.org/sustainable-development</u>)
- 28. Website: Green Key Global (https://www.greenkey.global)
- 29. Website: Biodiversity and Tourism: A Guide to Sustainable Practice (IUCN) (https://www.iucn.org)
- 30. Website: Sustainable Development Goals (SDGs) website for information on Goal 12: Responsible Consumption and Production (https://sdgs.un.org/)
- 31. Website: Zero Waste International Alliance for tools and strategies to achieve zero waste. (http://zwia.org/)
- 32. Website: Zero Waste Home https://www.zerowastehome.com/
- 33. Website: Sustainable Transport https://www.sustrans.org.uk/
- 34. Website: Green Hotelier https://www.greenhotelier.org/
- 35. Website: Sustainable lifestyles
- 36. Website: 12 ways to live more sustainably
- 37. Website: Consumption and sustainable life-styles
- 38. LinkedIn: The Role of Communication in Fostering a Sustainable Business Culture
- 39. LinkedIn: What are some effective ways to encourage sustainable practices in others?
- 40. LinkedIn: <u>Green leadership: driving sustainable change and employee engagement</u>
- 41. LinkedIn: <u>From Talk to Action: Best Practices for Effective Communication on Sustainability</u>
- 42. LinkedIn: Communicating for Sustainability: A personal journey

REFERENCES

OECD. (2022). Skills Summit 2022: Strengthening Skills for Equity and Sustainability – Providing Effective Up-and re-skilling Opportunities for All.

OECD. (updated 2024). Vocational Education and Training (VET) and Adult Learning. Retrieved from https://web-archive.oecd.org/fr/temp/2024-02-19/61526-vet.htm

Cedefop (European Centre for the Development of Vocational Training) (2005). Panorama: Trends and skills needs in tourism. Retrieved from https://www.cedefop.europa.eu/files/5161_en.pdf

UNESCO. (2024). Green and Digital skills for hospitality and tourism: from industry trends to competencies within TVET. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000391115/PDF/391115eng.pdf.multi

Vaugeois, N. (2009). "Made in BC" Innovation in Sustainable Tourism. doi:10.13140/RG.2.2.34237.36323

WTTC. (2024). A Net Zero Roadmap for Travel and Tourism. World Travel and Tourism Council, WTTC.



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Project co-funded by the European Union.

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