Co-funded by the European Union

Twin Transformation

“Increasing the Green and Digital Competencies of SME Owners and Employees in the Shoe Manufacturing and Leather Sector”

Project

WP4: Twin transformation trainings

4.2-Preparation/revision of digital interactive training

Title: Twin Transformation “Increasing the Green and Digital Competencies of SME Owners and Employees in the Shoe Manufacturing and Leather Sector”

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Sommario

Introduction

Between October 1 and December 31, 2025, we will analyze and select five priority sectors to guide the development of targeted training modules. The leather and shoemaking sector will be included as one of these key areas.

Sectors will be chosen based on these key criteria:

1. **Contribution to GDP / Economic Output**
   - **Why:** Sectors where SMEs contribute significantly to national income are economically vital.
   - **How:** Use national accounts data or sectoral GDP contributions.
   - **Example:** In many countries, manufacturing or retail SMEs are significant contributors to GDP.

2. **Employment Generation**
   - **Why:** SMEs are key job creators, especially in labor-intensive sectors.
   - **How:** Analyze labor statistics to identify sectors with high SME employment levels.
   - **Example:** In EU, mechanic-related SMEs often employ a large portion of the workforce.

3. **Number of Registered SMEs**
   - **Why:** High concentration of SMEs in a sector indicates its popularity and relevance.
   - **How:** Use business registration databases or SME agency records.
   - **Example:** The service sector (e.g., education, health, hospitality in EU) often has a high density of SMEs.

4. **Size and Importance to SMEs and Overall Economic Significance**
   - **Why:** Sectors that are both large in size and critical to SME operations have a greater influence on economic resilience and policy outcomes.
   - **How:** Assess sector size in terms of output, number of enterprises, and value-added; cross-reference with SME involvement.
   - **Example:** Construction and transportation sectors are often large employers and revenue generators for SMEs in many economies.

5. **Environmental Impact and Existing Sustainability Challenges**
   - **Why**: Sectors with high environmental footprints face urgent pressure to transition and thus represent key targets for green support.
   - **How:** Review environmental performance indicators like emissions, waste, or resource use per sector. Check Number of SMEs with environmental certifications (e.g., ISO 14001, EMAS)

- **Example:** Manufacturing and agriculture SMEs frequently face challenges related to emissions, water usage, and waste management.

6. **Degree of Digitalization**

- **Why**: Sectors with high digital adoption among SMEs tend to be more competitive, efficient, and adaptable to changing market conditions.
- **How**: Measure the use of digital tools (e.g., e-commerce, AI, cloud computing), adoption of ICT or Industry 4.0 technologies, and digital readiness indexes.
- **Example**: In many countries, retail and ICT-related SMEs lead in digital integration through online platforms, digital payments, and automated processes.

7. **Potential and Readiness for Green Innovation and Transition**

- **Why:** Sectors with technological adaptability and supportive frameworks are more likely to benefit from green innovation initiatives.
- **How:** Analyze R&D activity, availability of sustainable technologies, and regulatory or financial incentives.
- **Example:** Renewable energy and digital service SMEs often show high readiness for adopting sustainable practices.

8. **Presence of Existing Green Initiatives or Notable Gaps**

- **Why:** Understanding what green initiatives already exist—or are lacking— in a specific sector helps identify where further intervention is needed.
- **How:** Map sector-specific sustainability programs, funding schemes, and compliance with environmental regulations.
- **Example:** While some sectors like energy have well-established green programs, others like logistics or footwear sector may show gaps in eco-friendly mechanisms.

This streamlined approach will help partners develop training content that is relevant, practical, and aligned with both economic and environmental goals, ensuring the greatest impact for green and digital growth.

Training Modules Description

Module Title	Description	Responsible Partner
Module 1 Digital Product Passports for SMEs: Unlocking Sustainability and Digital Innovation	This module introduces SME managers to the concept of Digital Product Passports (DPPs), emphasizing their role in enhancing sustainability, circular economy practices, and digital transformation within small and medium enterprises. Participants will learn how to implement DPPs to track product lifecycle data, improve resource efficiency, and comply with emerging green regulations, all while fostering innovation and competitiveness.	Avecal
Module 2: Digitalization of the Production Process for Sustainable Growth in SMEs	This module offers practical guidance on how to leverage digital technologies to enhance operational efficiency while promoting environmental sustainability. Participants will gain a deep understanding of how digital tools and automation can be strategically applied to optimize resource use, reduce waste, and improve overall production quality. The module also addresses common challenges faced by SMEs when adopting digital solutions and provides actionable strategies to overcome them. Throughout the module, managers will learn to evaluate which digital technologies best fit their specific production context and how to integrate eco-friendly practices seamlessly with these innovations. Emphasis is placed on creating a clear, step-by-step plan for implementing digital transformation that aligns with the company's sustainability goals.	CTCP (for footwear)
Module 3 Integrating Circular Economy in SME Green and Digital Transformation	This module provides a comprehensive understanding of how adopting circular economy models can reduce waste, optimize resource use, and create long-term value while enhancing environmental and economic performance. Participants will explore practical approaches to redesign products, processes, and business models to close resource loops and promote sustainability. Managers will gain insights into overcoming common challenges in shifting towards circular operations and develop actionable strategies tailored to their company's context. By the end of the course, participants will be equipped to embed circular economy principles within their business strategy, driving innovation, resilience, and sustainable growth in a competitive, digitally-enabled market	CNA Marche
Module 4 Water Footprint Management and ISO	This module provides a comprehensive introduction to the purpose, scope, and framework of ISO 14046, highlighting its connection to life cycle assessment (LCA) and sustainability. This module is designed to raise critical awareness about the	TESK and Climate association (TR)

14046: Principles and Application	importance of sustainable water use by introducing the principles and practical application of ISO 14046. It emphasizes the urgent need to understand and manage water footprints in the context of environmental sustainability and responsible resource use. Participants will explore how ISO 14046 connects with life cycle assessment (LCA) to provide a comprehensive framework for evaluating water use impacts. The module encourages a thoughtful approach to defining objectives, setting system boundaries, and selecting functional units for water footprint studies. It highlights the importance of identifying and collecting accurate data on water inputs and outputs across all life cycle stages. Key assessment areas—such as water scarcity, water quality degradation, and local environmental impacts—are examined to foster informed interpretation and decision-making. The module also introduces best practices for reporting and transparently communicating water footprint findings. By the end of the module, participants will be equipped not only with technical knowledge but also with a heightened awareness of the environmental and societal implications of water use, enabling them to contribute to more sustainable water management practices	
Module 5 Greenhouse Gas Emissions Management: ISO 14064-1 Quantification and Reporting Standards	This module is designed to raise awareness and build capacity around the critical issue of greenhouse gas (GHG) emissions by introducing participants to ISO 14064-1—the internationally recognized standard for quantifying and reporting GHG emissions and removals at the organizational level. Through this module, learners will gain a deeper understanding of the environmental impact of emissions and the importance of transparent and credible GHG reporting. Participants will explore essential concepts such as defining organizational boundaries, identifying emission sources, applying quantification methods, and managing data quality. The module also covers best practices for consistent and verifiable GHG reporting, helping organizations align with both regulatory requirements and voluntary climate commitments. By the end of the module, participants will be equipped to not only implement robust GHG inventories but also to promote greater accountability and climate responsibility within their organizations and communities	CTCP (for Footwear)
Module 6 Understanding and Applying ISO 14067: Carbon Footprint of Products	This module is designed to raise awareness and build a strong understanding of ISO 14067, the international standard for quantifying the carbon footprint of products (CFP). It emphasizes the importance of recognizing the environmental impact of products across their life cycle and equips	TUAF

	participants with the knowledge needed to take meaningful action. Participants will explore foundational concepts such as the scope and key definitions related to CFP. The module highlights why setting appropriate system boundaries, defining functional units, and gathering accurate life cycle inventory data are critical steps in understanding a product's carbon impact. It also sheds light on the methods used to calculate CFP—covering emission factors, allocation rules, and the life cycle stages they apply to. Beyond technical application, the module promotes awareness of the broader role CFP plays in sustainability efforts. It guides participants through best practices for transparent reporting and effective communication of CFP results, ensuring that claims are credible and support informed decision-making. Additionally, it addresses verification processes, data quality considerations, and strategies for managing uncertainty—empowering organizations to build trust and demonstrate leadership in environmental responsibility. By the end of this module, participants will not only know how to apply ISO 14067 but also understand its value in raising awareness, driving sustainable product design, and contributing to a low-carbon economy

According to the agreed module structure (see the list below), we recommend including at least **one case study** per sector to ensure that all five selected sectors are adequately represented throughout the six modules. Each digital training module will be designed using H5P presentations hosted on Moodle or a similar platform.

The training modules will be organized into the following sections to foster an engaging and practical learning environment:

- **Content**: Core subject matter presented with clear explanations and multimedia enhancements.
- **Case Study**: Real-life examples relevant to each sector to demonstrate practical application of the concepts.
- **Hands-on Activity**: Interactive exercises that encourage learners to apply their knowledge actively.
- **Self-Assessment Quiz:** Short quizzes for learners to evaluate their understanding and reinforce learning outcomes.

The project will produce a minimum of **16 interactive digital training materials**, comprising five comprehensive presentations—one for each sector. These materials will be developed with a focus on interactivity, clarity, and practical relevance to maximize learner engagement and participation.