TWIN TRANSFORMATION PROJECT

Project No: 2024-1-TR01-KA220-VET-000255722

INCREASING THE GREEN AND DIGITAL COMPETENCIES OF SME OWNERS AND EMPLOYEES IN THE SHOE MANUFACTURING AND LEATHER SECTOR

WORK PACKAGE N°3

GREENHOUSE GAS EMISSION, WATER AND CARBON FOOTPRİNT MEASUREMENT STANDARDS TRAININGS

TRAINING PLAN

May 2025

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INTRODUCTION

The present training plan aims at guiding trainers in the implementation of the "**Greenhouse gas emission measurement standards training**" course. The TWIN TRANSFORMATION project was carried out by 8 partners organizations from Turkey, Italy, Spain, and Portugal. This document is addressed to trainers and provides them with guidelines for setting up a successfull training course among SMEs workforce. The outcomes consist of content and methodologies for teaching and learning in a form of on-line or blended learning. The training plan describes the background of the training course, the training methodologies to be applied.

The document also aims at illustrating the results of the validation activities developed with in the project. The validation was carried out by the target groups – trainers and SMEs workforce – in English language and in the partners national languages: Turkish, Italian, Spanish and Portugues. Various feedback was collected throughout the period of the project in order to implement suggestions and changes to the training content and process, if needed.

SECTION 1- GENERAL INFORMATION

1.1.ABOUT TWIN TRANSFORMATION PROJECT:

Main Objective:

To contribute to the solution of the environmental and climate change problem by increasing the knowledge, skills and awareness of the owners and employees of the businesses operating in the shoe manufacturing and leather sector, through the joint training program to be prepared and the training materials to be created based on these programs.

Target Groups:

- Approximately **50 staff and managers of the project partners** involved in the project
- **8 trainers/experts who will participate in the training of trainers** on the standards related to **greenhouse gas measurement** (in 5 sector)
- **30 sector members (10 for each training)** who will attend 3 different standard trainings on greenhouse gas measurement **in each countries** (in 5 sector)
- **200 tradesmen and craftsmen (SMSs) and apprentices in 5 sectors** will participate in seminars concerning digitalisation, protection of environment and climate change issues
- **150 people**, representatives of private and public institutions and organizations related to the sector, who will participate in **awareness raising events**

Final Beneficiaries :

- Other personnel, managers and affiliated organization units and members of the project partner organizations
- Tradesmen and craftsmen (SMSs) and apprentices in the 5 sectors
- Other educational institutions serving in the sector
- Public and private institutions and organizations, stakeholders, who are the parties of the economic sector

Work Packages:

- Implementation, evaluation, quality monitoring of the project
- Preparation of a current status and good practice examples report on green issues regarding shoemaking and leather
- sector
- Organizing ToT- pilot trainings on ISO standards of gas emission-carbon-water foodprint- environment protection-climate
- change
- Preparation of e-platform and digital materials and organizing information and awareness-raising seminars (online-hybrid)
- Dissemination and multiplier events

Main Results:

- Prepared a current status and good practice examples report on green issues regarding shoemaking-leather sector
- 9 staff of the partners of the project received trainer training about ISO standards
- 120 employees gained proficiency in gas emission, carbon and water footprint measurement
- 200 employees/apprentices were informed about env. protection and climate change and its effects on the sector.
- The project was promoted and disseminated at local, national and international level

1.2.ABOUT WORK PACKAGE 3

Greenhouse gas emission, carbon and water footprint measurement standards training

General objectives:

The objective of this work package; Reducing the damage they cause to the environment and climate change by increasing the capacity of companies in the measurement of greenhouse gases arising in the production process in the sector.

With the standard trainings to be given to the members of the enterprises, it will be ensured that the enterprises and the products they produce measure the prints left in the air and in the water. Thus, they will be encouraged to take measures that will cause less harm to the environment and climate. This information will already be requested for export products in the near future. Every sector produces wastes that affect more or less water and air negatively. Although the project focuses on the leather and shoe manufacturing sector, the trainers participating in the ToT will be able to use this information for other sectors as well.

The partnership aims to carry out studies on the climate change problem in the national and international arena, to contribute to the updating of the country's legislation, to support more efficient and effective studies on the climate change problem in the academic field, including R&D, and to direct the policies of our country. Although it has been a while since its

establishment.

Main results:

Main results of this work package:

- To create an international standard training program on water and carbon footprint topic and measurement of them and to implement it as a pilot.

- The capacities of companies have been increased in the measurement of greenhouse gases emerging during the production process in the sector.

- The individual knowledge and skills of company personnel have been increased in the measurement of greenhouse gases emerging during the production process in the sector.

- At the end of the training given to the employees of the enterprises, the participants of the training will be able to measure the carbon and water footprints of their enterprises and the products they produce.

Qualitative and quantitative indicators of the work package:

Quantitative:

- Number of people participating ToT (9 person form partner organizations)

- Number of people participating in standard training in partner countries (3 types of standard training x 4 countries x 10 participants each)

Qualitative:

- Feedback forms (all participants will answer)

- National (English) and joint (Project languages) evaluation report of trainings

- Feedback from companies

After the trainings (ToT and standards trainings), a certificate of participation will be given to the trainers. The quality of the training will be measured by a questionnaire to be prepared.

1.3.SUSTAINABILITY

Our project will be carried out together with 8 partner organizations related to the sector and vocational training, 5 from Turkey, one each from Italy (CNA), Spain (AVECAL) and Portugal (CTCP).

TESK is the parent organization of the chambers of which tradesmen and craftsmen are members. It aims to reflect the knowledge and experience gained by leading this project to members in other sectors.

TUAF is a sectoral professional organization representing Turkey in general, to which small businesses in this sector are members. It represents 25000 tradesmen-craftsmen in the sector.

Siteler MEM is a vocational training centre affiliated to the MoNE. Siteler MEM is an VET institution that provides apprenticeship training in many professions, including shoemaking.

Ministry of Commerce (Diroctarate General of Tradesmen Craftsmen and Cooperatives) is a public institution working on the development and transformation of tradesmen and craftsmen and their professional organizations. It is responsible for making official regulations regarding the said sector. It is in constant communication with TESK and its subunits.

Climate Association is one of the important NGO which is working on environment protection and climate. It provides many trainings, consultancy and projects on environmental protection and climate change. Although it is a small association, its founders are experts with knowledge and experience in the field of environment. Some of its members represent Turkey at the EU level on environment and climate issues.

CNA, on the other hand, is a territorial professional organization representing SMSs in many sectors, including the leather and shoemaking sector.

CTCP is a private, non-profit research institute and VET provider, founded in 1986, with 483 private companies (footwear) as members, employs 50 technicians, engineers and senior specialists and trainers and works with approximately 30 external consultants/trainers in a regular basis.

AVECAL was founded on the 7th of October 2010 as a professional associative entity, and a non-profit organisation, with the objective of representing and defending the interests of the business owners of the footwear sector and associated industries of the Valencian Community.

The sustainability of the project outputs will be the success of our project. Partners on the Turkish side constitute three important pillars of the sector. TESK, TUAF and the Ministry of Trade DGTCC are institutions that can easily reach tradesmen and craftsmen. TESK and TUAF also have vocational training among their members. Therefore, project outputs can be easily disseminated throughout Turkey. Again, through Siteler MEM, it is possible for the outputs to reach the Ministry of National Education and to be delivered to other training centers and to apprentices and other business employees who receive training there.

Similarly, partner organizations in EU countries are organizations that are in constant contact with the sector and provide them with training and consultancy services.

The increasing need for training and consultancy regarding the twin transformation process of businesses will also ensure sustainability.

SECTION 2- TRAINING METHODOLOGY

2.1. TRAINING METHODS

Within the 3rd work package, training will be provided on 3 ISO standards related to carbon footprint, water footprint and greenhouse gas measurement and reporting. The first training is a trainer training where the staff of the partner organizations will attend. Then, these trainers will train the sector employees in their own countries on the same subject.

2.1.1. Training of Trainers: This training will be held in Ankara/Türkiye and at least one trainer from each partner organization will attend. It'll be preferable for these people to be graduates of science and engineering sciences and to have been trainers. The training will last for 4 days and will be given face to face. CCPRA expert/trainers will providing this ToT. If needed, CCPRA experts/trainers will continue to provide consultancy on online platforms to trainers providing training in the field.

Persons who take this training will be trainers in the standard trainings in their own countries. The program and contents of 3 standard trainings of 2 days, each to be given in partner countries, will be created in this training.

The ToT program will be implemented within the 6th-8th months of the Project.

The **ToT Program** is included in **Annex 1.**

2.1.2. ISO 14067 Product Carbon Footprint Standard - ISO 14046 Water Footprint Standard- ISO 14064 Greenhouse Gas Standards Trainings: 3 separate training programs will be organized for 3 standards in each partner country. The program and contents/presentations of this training will be prepared together with the CCPRA experts and will give to trainers.

They're a 2- day training programs in which the employees of companies working in the sector in each country (10 each) will attend. They can be given hybrid or face to face. Topics will be explained on first day and practice will be done on the second day.

Trainer participating in the training of trainers will give this training in their own countries. The sector employees who will participate in the standard training will be determined primarily from the shoe manufacturing sector. In addition, employees from the sectors determined for WP 4 will also be invited to the trainings.

Sector employees participating in the training will conduct a study that measures the carbon and/or water footprint of their companies after the training.

The ISO standards trainings will be implemented within the 8th-14th months of the project.

The **ISO standards trainings programs** are included in **Annex 2.**

2.2. DESCRIPTION OF THE TRAINING

The most important result of the training needs analysis conducted during the project writing phase was that training programs should be more interactive. Training methods that are completely narrative-based, use less visuals, and do not include trainees in the training are not particularly effective in adult education.

For this reason, the training materials developed within the scope of the Project;

- Encourage self-learning,
- Increase motivation,
- Apply the gamification method,
- Incorporate technology into learning and thus facilitate learning,
- Are not dependent on time and space,
- Support online group-oriented studies,
- Support face-to-face learning

features.

SECTION: 4 TESTING METHODOLOGY AND EVALUATION REPORTS

4.1. STRUCTURE OF THE TESTING

In the testing phase, the outputs (The training programs including the modules content and the presentations, training methods, etc.) developed in the frame of the project will be evaluated by the participants (trainers and sector workforce). The feedback questionnaire consists of the areas related to these outputs.

4.2. FEEDBACK QUESTIONNAIRE: The basic tool to collect the feedback for the testing processes is the questionnaire. The feedback questionnaire to be applied in each country is listed below. Each person participating in the pilot testings will fill in one individual questionnaire.

The questionnaire form to be used in standards training (ToT and other training) is **in Annex 3.** The survey will be updated under Title B (QUALITY OF TRAINING MODULES (STANDARDS)) depending on the training topic (ISO 14046-14064-14067).

Project partners need to use online tools such as SurveyMonkey or Google Form to be able to share xls data and graphics.

The participants will be asked to fill in the questionnaire honestly and carefully, thus supporting the reliability of the data collected.

The feedback evaluation will provide ground to make changes if needed and improve the outcomes to final products.

Each partner will test and evaluate the developed material in their national languages or in English.

Each person participating in the training will provide a feedback by compiling a standard feedback questionnaire to be filled in using an online system for the automatic data collection after the pilot testings. The feedback questionnaire can be found below.

4.3. TRAININGS EVALUATION REPORTS:

CTCP-CCPRA and TESK will jointly evaluate the ToT using the feedback form.

Each partner will produce a national report with the data collected. Each national report will be combined with the others and a single international report will be prepared to indicate the improvements and changes where needed to be applied in the training contents as a part of the quality process.

The leading partner CTCP of the WP3 of the project will collect the national reports and prepare an international report after the pilot testings.

ANNEX 1

INCREASING THE GREEN AND DIGITAL COMPETENCIES OF SME OWNERS AND EMPLOYEES IN THE SHOE MANUFACTURING AND LEATHER SECTOR

Project No: 2024-1-TR01-KA220-VET-000255722

ISO 14046 - ISO 14064-1 - ISO 14067 STANDARDS

TRAINING OF TRAINERS AGENDA

(Ankara-TÜRKİYE)

ISO 14064-1: GREENHOUSE GAS EMISSIONS QUANTIFICATION AND REPORTING

1.DAY

Time	**Topic Title**	**Content Description**
10:00 - 11:00	Introduction to ISO 14064 Standard	Overview of GHG management, structure and history of ISO 14064 series
11:00 - 12:00	Key Terms and Definitions	GHG, sinks, sources, boundary setting
12:00 – 13:00	**Lunch**	
13:00 - 14:00	Organizational and Operational Boundaries	Defining boundaries, control and equity share approaches
15:00 - 16:00	Case Study and Discussion	Group work based on a real-life example

2.DAY

Time	**Topic Title**	**Content Description**
10:00 - 11:00	Preparing the GHG Inventory	Data collection, emission factors, and calculation methods
11:00 - 12:00	Reporting Requirements Quality Management and Data Security	Structure and content of a report in compliance with ISO 14064-1 Data quality, consistency, and verification principles
12:00 – 13:00	**Lunch**	
13:00 - 14:00	Verification and Assurance	Types of verification and third-party audits
15:00-16:00	GHG Reduction Projects Legal Regulations and Compliance	Defining projects and calculating their impacts

	Preparing a Sample Report	National and international legal frameworks Creating a sample report with participants
16:00 - 16:30	General Assessment	Q&A, evaluation test, and closing

ISO 14067: CARBON FOOTPRINT OF PRODUCTS – REQUIREMENTS AND GUIDELINES FOR QUANTIFICATION AND COMMUNICATION

3.DAY

Time	**Topic Title**	**Content Description**
09:30 - 10:00	Introduction and Scope of ISO 14067 System Boundaries and Life Cycle Inventory	Overview of product carbon footprint, definitions, and scope of application Setting boundaries, functional unit, and data collection methods
10:00 - 11:00	CFP Calculation and Allocation Rules Reporting and Communication of CFP	Calculation methodologies, emission factors, and allocation principles Structure of CFP report, communication principles and claims
11:00 - 12:00	Verification and Quality Requirements	Verification procedures, data quality and uncertainty management
12:00 - 12:30	Case Study and Final Assessment	Interactive case study, discussion and closing Q&A
12:30 – 13:30	**Lunch**	

ISO 14046: ENVIRONMENTAL MANAGEMENT – WATER FOOTPRINT – PRINCIPLES, REQUIREMENTS AND GUIDELINES

3.DAY

Time	**Topic Title**	**Content Description**
13:30 - 14:30	Introduction to ISO 14046 and Water Footprint Concept	Purpose, scope, and relation to LCA and sustainability

14:30 - 15:30	Goal and Scope Definition Water Inventory Analysis	Defining the objective, boundaries, and functional unit of a water footprint study Identifying water inputs and outputs, and collecting data across life cycle stages
15:30 - 16:30	Impact Assessment and Interpretation Reporting and Communication	Assessment categories (e.g. water scarcity, degradation) and result evaluation Structure of a water footprint report and principles for transparent communication
16:30 - 17:30		Example case application, group discussion, and wrap-up

4.DAY

Time	**Topic Title**	**Content Description**
10:00 – 11:00	Information on training to be given in countries Evaluation of ToT	Implementation of feedback survey
11:00 – 12:00	Closing Speeches	
12:00 – 13:00	**Lunch**	

ANNEX 2

ISO STANDARDS (14046-14064-14067) TRAININGS PROGRAMS

ISO 14046 TRAINING PROGRAM

General Information

Training Title: ISO 14046: Environmental Management – Water Footprint – Principles, Requirements and Guidelines
Duration: 2 Days
Target Audience: SME's owners/technical staff
Training Objective: To inform participants about climate change and to equip participants with essential knowledge of ISO 14046 requirements and methodology for assessing the water footprint of products, processes, and organizations

1-Day Training Plan

Time	Topic Title	Content Description
09:30 - 10:30	Climate Change	Climate Crisis
10:30 - 11:30	Introduction to ISO 14046 and Water Footprint Concept	Purpose, scope, and relation to LCA and sustainability
11:30 - 12:30	Goal and Scope Definition Water Inventory Analysis	Defining the objective, boundaries, and functional unit of a water footprint study Identifying water inputs and outputs, and collecting data across life cycle stages
12:30 – 14:00	**Lunch**	
14:00 – 15:00	Impact Assessment and Interpretation	Assessment categories (e.g. water scarcity, degradation) and result evaluation
15.00 – 16:00	Reporting and Communication	Structure of a water footprint report and principles for transparent communication
16:00 - 16:30	Example Homework	Calculation of WFP

2-Day Training Plan

Time	Topic Title	Content Description
10:00 - 12:30	Checking Homework	The applications made by the participants will be examined and the errors made will be corrected.
12:30 – 14:00	**Lunch**	
14:00 - 16:00	Example	Calculation of WFP
16:00 - 16:30	Implementation of a satisfaction survey	Measuring the satisfaction level of participants regarding the training

ISO 14064-1 TRAINING PROGRAM

General Information

Training Title: ISO 14064-1: Greenhouse Gas Emissions Quantification and Reporting
Duration: 2 Days
Target Audience: SME's owners/technical staff
Training Objective: To inform participants about climate change and to enable participants to understand the scope, requirements, and application methods of ISO 14064-1 standard

Day 1 - Training Plan

Time	Topic Title	Content Description
09:30 - 10:30	Climate Change	Climate Crisis
10:30 - 11:30	Introduction to ISO 14064 Standard	Overview of GHG management, structure and history of ISO 14064 series
11:30 - 12:30	Key Terms and Definitions	GHG, sinks, sources, boundary setting
12:30 – 14:00	**Lunch**	
14:00 - 15:00	Organizational and Operational Boundaries	Defining boundaries, control and equity share approaches
15:00 - 16:00	Case Study and Discussion	Group work based on a real-life example

Day 2 - Training Plan

Time	Topic Title	Content Description
10:00 - 11:00	Preparing the GHG Inventory	Data collection, emission factors, and calculation methods
11:00 - 12:00	Reporting Requirements Quality Management and Data Security	Structure and content of a report in compliance with ISO 14064-1 Data quality, consistency, and verification principles
12:00 – 13:30	**Lunch**	
13:30 - 14:30	Verification and Assurance	Types of verification and third-party audits
14:30-15:30	GHG Reduction Projects Legal Regulations and Compliance Preparing a Sample Report	Defining projects and calculating their impacts National and international legal frameworks Creating a sample report with participants
15:30 - 16:30	Example Implementation of a satisfaction survey	Calculation of CFP Measuring the satisfaction level of participants regarding the training

ISO 14067 TRAINING PROGRAM

General Information

Training Title: ISO 14067: Carbon Footprint of Products – Requirements and Guidelines for Quantification and Communication
Duration: 2 Days
Target Audience: SMEs owners/technical personnel
Training Objective: To inform participants about climate change and to provide participants with a practical overview of ISO 14067 requirements for calculating and communicating the carbon footprint of products (CFP)

1-Day Training Plan

Time	Topic Title	Content Description
09:30-10:30	Climate Change	Climate Crisis
10:30 - 11:30	Introduction and Scope of ISO 14067 System Boundaries and Life Cycle Inventory	Overview of product carbon footprint, definitions, and scope of application Setting boundaries, functional unit, and data collection methods
11:30 - 12:30	CFP Calculation and Allocation Rules Reporting and Communication of CFP	Calculation methodologies, emission factors, and allocation principles Structure of CFP report, communication principles and claims
12:30-14:00	**Lunch**	
14:00 - 15:00	Verification and Quality Requirements	Verification procedures, data quality and uncertainty management
15:00 - 16:00	Case Study and Final Assessment Homework	Interactive case study, discussion and closing Q&A

2-Day Training Plan

Time	Topic Title	Content Description
10:00 - 12:30	Checking Homework	The applications made by the participants will be examined and the errors made will be corrected.
12:30 – 14:00	**Lunch**	
14:00 - 16:00	Example	Calculation of CFP
16:00 - 16:30	Implementation of a satisfaction survey	Measuring the satisfaction level of participants regarding the training

ANNEX 3

INCREASING THE GREEN AND DIGITAL COMPETENCIES OF SME OWNERS AND EMPLOYEES IN THE SHOE MANUFACTURING AND LEATHER SECTOR

GREENHOUSE GAS EMISSION MEASUREMENT STANDARDS TRAININGS SATISFACTION QUESTIONNAIRE

Dear Participant,

This satisfaction survey was prepared to obtain the opinions and suggestions of the participants regarding the training planning, training content, training process, trainers and training organization for ISO 14046, 14064-1, 14067 Standards Trainings. The answers you will give to the survey will not be shared with third parties and will be used to increase the quality and efficiency of similar studies to be conducted in the future.

Thank you for your contributions and time.

Please tick the best option that reflects your opinion corresponding to the statements:

1 – strongly disagree

2 – do not agree

3 – undecided

4 – agree

5 – totally agree

	1	**2**	**3**	**4**	**5**
A. EVALUATION OF TRAINING SCOPE AND ORGANIZATION					
The duration of the training was sufficient.					
The timing (date) of the training was appropriate.					
The subject of the training was suitable for our needs.					
The equipment used in training was sufficient.					
Adequate information was provided regarding the content and purpose of the training before and during the training.					
The educational environment was suitable.					
B. QUALITY OF TRAINING MODULS (STANDARDS)					
I am satisfied with the ISO 14046					
I am satisfied with the ISO 14064-1					
I am satisfied with the ISO 14067					

C. EVALUATION OF TRAINERS						
The trainer was knowledgeable on her/his subject and had sufficient knowledge and experience.						
She/he explained the topics clearly, understandably and in a way appropriate to the level of the participants.						
She/he related the content of the training to current issues and business life.						
D. EVALUATION OF THE OUTCOMES AT THE END OF TRAINING						
Training contributed to my professional development.						
The training provided me with new knowledge and skills that I can apply in business.						
The training provided me with new knowledge and skills that I can apply in business.						
The training met my expectations.						

What are your suggestions to make the training more useful?

Please state your other opinions and suggestions.