


D1.4.2 – Deployment Action Plan

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1 Executive Summary

1.1 Project Overview

The GREENE 4.0 project aims at facilitating and supporting small and medium-sized enterprises (SMEs) in the manufacturing sector in the adoption and use of green production methods and digital technologies. User acceptance plays a crucial role in the successful adoption and implementation of these new technologies.

D1.4.2 – Deployment Action Plan works closely with D1.2.1 (Methodology Report) and D1.3.1 (User Acceptance Model) as it provides insights on how to deploy the User Acceptance Model (UAM) under two phases:

- Initial testing: Once the first version of the UAM has been designed using the chosen methodology, the project partners (PPs) are invited to test it with at least 60 companies (approx. 9/country) and provide feedback using the template in the annex.
- The final UAM will be delivered by capitalizing on the testing time.

1.2 Scope of the Document and Summary

This document provides guidance and concept definition to enable the PPs to deliver A1.4 and A1.3 in accordance with the AF and consistently across all the PPs facilitating the capitalization of results. This report is structured to enable each partner to plan and organize the testing of the UAM. Thus, this action plan provides the following benefits to the PPs:

- Build a common understanding of the objectives of the UAM, the testing phase to deliver a final version by May 2024, and the interlinkages with the project (especially within work package (WP) 1).
- Facilitate the joint planning of activities within the consortium to ensure consistency of results and mitigate the risks in terms of quality, impact, and further work building in WP2 (Open Knowledge Box).
- Provide strong and detailed processes for implementing the peer review and testing report under D1.4.1 and for finalizing the UAM under D1.3.1.
- Describe a step-by-step process to report on the testing of the UAM implemented by each territory represented in GREENE 4.0 (supported by a template in the annex).
- In this way, this report provides insights for PPs to test the developed UAM:
- Each territory implements the first version of the UAM among at least 9 SMEs from March to April 2024 and collects feedback on the test through the template in the annex.
- All PPs work together to build the most comprehensive UAM that meets the needs of manufacturing and producing SMEs in Central Europe (CE) to support sustainable digitalization.

1.3 Audience

This document is addressed to all project partnership members as all members of the partnership should participate in the development of 'fit for GREENE 4.0 UAM' (A1.3):

- (1) Participation in the co-creation camps to develop a first version of the UAM.
- (2) Participation in the UAM testing phase (9SMEs/country).



(3) Delivery of a final UAM supporting CE SMEs towards greening digitalization. It should be considered as an internal document, and the appropriate status should be reflected in the 'Dissemination Level' table.

1.4 Change Control

FHK/PP3 created this guidance document, and it is subject to the standard project change control where PPs are requested to provide feedback on the stated definition or tools in writing to the deliverable responsible (in this case FHK/PP3) in a timely manner (within 8 working days after each edition). According to the normal procedure, at any time partners feel that the project methodology should be changed, the request should be brought to the Activity leader or Deliverable leader (in this case FHK/PP3, UL/PP4, and UJEP/PP5 and Project Management Lead, PTP/LP) to consolidate feedback from other partners and integrate and disseminate the final agreed changes. A new version of the document should be created and recorded in the 'Document History' table of the document.



2 Introduction

2.1 Project Overall Flow

The CE manufacturing industry is challenged by change. Global supply chains are increasingly disrupted, and the green transition requires more sustainable and intelligent value chains. The GREENE 4.0 project supports manufacturing companies in piloting such new value chains. The project also supports the co-design of new products and services through open innovation approaches. To achieve these goals, it brings together the business sector with the education and research sectors and decision-makers. GREENE 4.0 is structured in 4 WPs each with a specific objective:

- The objective of WP1 is to map the needs and challenges of SMEs towards the uptake of green technologies, as well as to map the enablers available in different CE territories. The results will then be translated into the delivery of the UAM that will guide companies in the adoption of new technologies. The UAM should support the linkage to the tools identified or developed in WP2 for the main challenges of SMEs.
- WP2 is working on developing solutions to address these challenges and linking them to existing solutions. The aim is to create a strong innovation ecosystem to support SMEs in adopting green processes. WP2 will develop and establish the basis for the Transnational Open Knowledge Box solutions collecting tools to support capacity building and innovation processes.
- WP3 collect all the information generated in WP1 and WP2 and develops 3 innovation programs to facilitate the testing of the Transnational Open Knowledge Box and to ensure the transferability of the project's results with the Innovation Platform connecting the 7 sectoral manufacturing clusters companies with smart and green manufacturing solution providers to jointly generate sustainable supply chain models.
- WP4 focuses on policy learning and promotes the transferability of the project's results towards the quadruple helix approach with a focus on SMEs (demand), solution providers (enterprises, RTOs) and policy makers.

The project flow and the synergies and linkages between the WPs and their deliverables are shown in *Figure 1*.

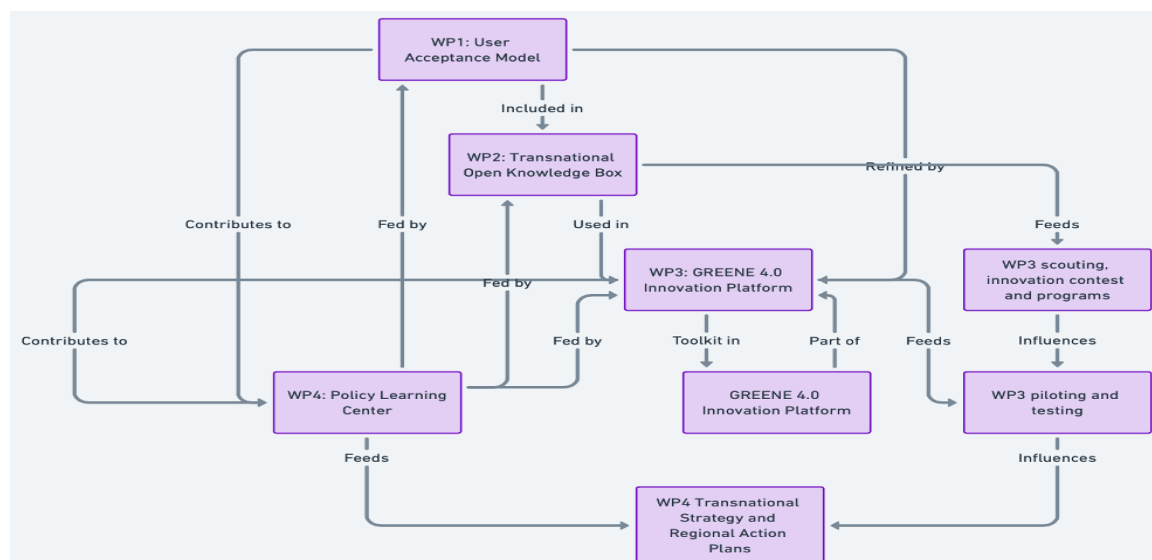


Figure 1: Project Flow (Source: Project Generated, 2023)



2.2 Project Overall Flow

The main output of WP1 is the UAM. *Figure 2* showcases the interlinkages between the activities within WP1 leading to the delivery of the UAM.

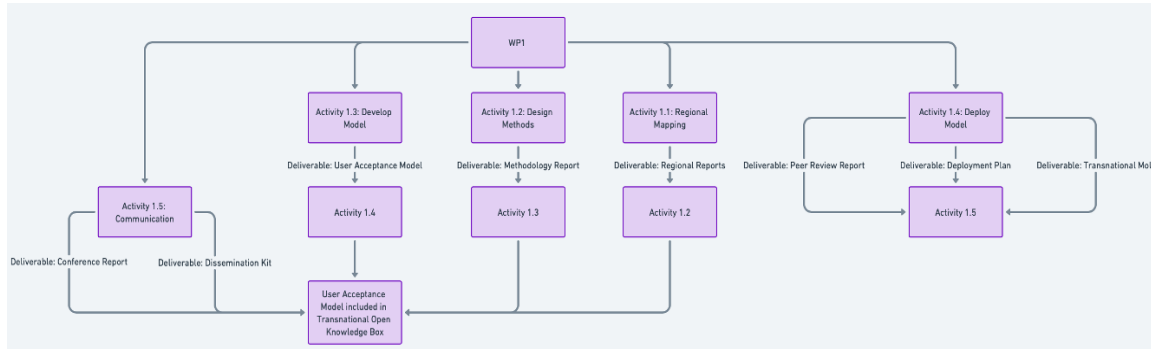


Figure 2: WP1 interdependencies (Source: Project Generated)

2.2.1 UAM Definition

This report shows how to implement the UAM in two steps:

- Test the UAM.
- Revise and deliver a final UAM for submission to the External Advisory Board (EAB) for final review.

The UAM is a framework that brings together evidence-based strategies and practical tools, developed in collaboration with SMEs themselves. It provides clarity for manufacturers who may feel overwhelmed by the complexity of the transition to smart manufacturing. By establishing common goals, the UAM fosters coordination among industry leaders, solution providers, research institutions, and policy makers, bringing a personal touch to transformation efforts. The goals of the GREENE 4.0 UAM are to:

- Accelerate adoption: Accelerate the adoption of green and digital technologies among SMEs to smoothly transition them to sustainable and digital operations.
- Sub-objectives:
 - Raise awareness: Increase SMEs understanding of the benefits and importance of adopting green and digital technologies.
 - Identify barriers: Identify and categorize the main barriers SMEs face in adopting new technologies and sustainable practices.
 - Leverage enablers: Identify and leverage existing factors that can help SMEs transition to green and digital technologies.
 - Develop an action plan: Create targeted measures and actions to overcome barriers and leverage enablers.
 - Focus on 7 key manufacturing sectoral clusters for Central Europe: Create a UAM that fits 7 sectoral manufacturing clusters through a common base and targeted sectoral specificities.
 - Validate and refine: Test and improve the UAM through stakeholder engagement, workshops, and pilot testing based on feedback and performance metrics.



2.2.2 WP 1 Process and Structure

WP1 follows a strict methodology to deliver the UAM. As shown in *Figure 3*, WP1 is divided into 4 phases:

- **Assess** – define the strengths and weaknesses of SMEs in the adoption of digital solutions and greener manufacturing. This phase is represented by the survey implemented to highlight the challenges and enablers within the CE SME ecosystems (and analyzed within D1.1.1 – Regional Mapping Analysis). This survey enables the project consortium to better understand the stage of development of SMEs in CE towards the adoption of digital solutions and their resistance to change.
- **Create** – In order to capitalize on the knowledge developed in D1.1.1 and to create a UAM that considers the different territories, different sectors, different cultures, etc., a common methodology needs to be delivered including key considerations and priorities (including scenario/challenges clustering). These considerations will be jointly developed by the consortium during 3 co-creation camps. The execution of these 3-co-creation camps as well as the creation of a common methodology supports the creation of a first version of the UAM.
- **Execute** – Once the UAM is designed, each country implements it within a minimum of 9 companies to test it and provide feedback using the template in the annex.
- **Sustain** - After the test has been implemented, a peer-review and testing report is issued under the leadership of UL/PP4 reflecting the testing phase in each territory. The UAM is refined accordingly and into the Open Knowledge Box (WP2).

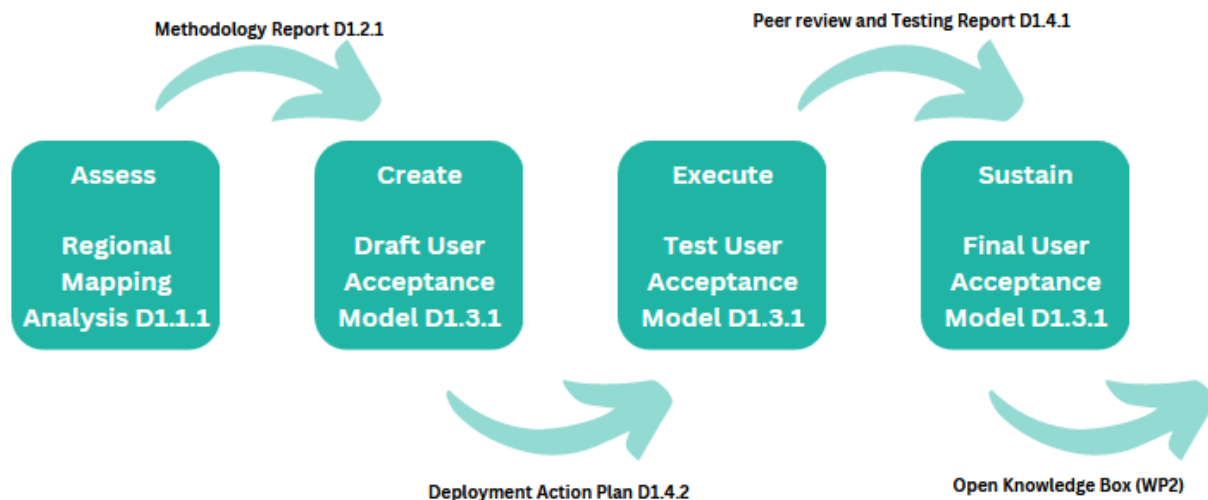


Figure 3: Deliverable Critical Path towards the Final UAM (Source: Project Generated, 2023)

Communication and strong leadership are essential at each phase of UAM implementation process. Indeed, strong relationships with the quadruple helix and especially with SMEs must be fostered in order to develop the most fit-for-purpose UAM. A presentation for the project, which can be used to promote the project with SMEs, is provided by PTP/LP in the shared MS teams.

2.2.3 Stakeholder Engagement

It is essential to involve a wide range of stakeholders in the development of the User Acceptance Model, using a quadruple helix approach involving local authorities, national authorities, companies, consumers associations, and sectoral cluster and agencies. Their input ensures that the UAM is practical, relevant, and responsive to the specific needs and challenges of SMEs. This report also covers the engagement process with relevant stakeholders.



2.2.4 Target of the UAM

In the European Union (EU), SMEs represent 99 % of all organizations and contribute to securing approximately 85 % of new employment over the last five years. In addition, SMEs are key players in various supply chains. In this context, large organizations rely heavily on SMEs to provide high quality products or services at low cost (European Commission, 2018¹).

Therefore, the UAM targets SMEs in seven CE countries. According to the SME definition used in the survey (D1.1.1), the target enterprises have:

- Less than 250 employees,
- Annual turnover not exceeding EUR 50 million,
- Annual balance sheet total not exceeding EUR 43 million.

2.3 Contribution to Activity 1.4

The objective of A1.4 is to deploy and test the UAM to produce a final version that can be integrated into the Transnational Open Knowledge Box delivered in WP2.

This activity focuses on piloting and testing the UAM and supporting its development (solution design) under A1.3. A Transnational Memorandum of Understanding (MoU) has been signed between the PPs and Associated Partners (ASPs) for the proper implementation and testing of the UAM (D1.4.3). This long-term cooperation document ensures the sustainability of the project results as well as a joint action plan for the scale-up and exploitation of the GREENE 4.0 results. The Transnational MoU is signed for a period of 8 years (3 years of project implementation and 5 years after project completion). In October, FHK/PP3 organized a co-working seminar to start elaborating the deployment and testing scenarios for the target group (companies). Once, the deployment action plan and testing scenarios are realized, the EAB reviews it and provides its feedback and approval. If necessary, FHK/PP3 performs the updates based on EAB input. Finally, UJEP/PP5 organizes a joint workshop with all PPs to present and explain the deployment action plan and the selected scenarios for testing. Thus, the UAM is deployed and tested in 7 project regions/countries:

- PTP/LP will deploy and test the UAM in Slovenia
- TGZ/PP2 will deploy and test the UAM in Germany
- FHK/PP3 will deploy and test the UAM in Austria
- ICUK/PP6 will deploy and test the UAM in the Czech Republic
- IMECH/PP7 will deploy and test the UAM in Italy
- KPT/PP8 will deploy and test the UAM in Poland
- IFKA/PP9 will deploy and test the UAM in Hungary

During the piloting and testing phase, three online interregional peer-review seminars are organized to collect, analyze, and share preliminary data among the testing/piloting sites. 3 online interregional seminars will be organized by FHK/PP3, UL/PP4 and UJEP/PP5. After the piloting and testing phase is completed, UL/PP4 organizes a transnational workshop with PTP/LP, TGZ/PP2, FHK/PP3, UJEP/PP5, ICUK/PP6, IMECH/PP7, KPT/PP8, IFKA/PP9 and ASPs to analyze and draft the key findings and ensure the delivery of the Peer Review and Testing Report (D1.4.1). This data is then fed into the co-design process in A1.3 to finalize the development of the UAM.

¹ European Commission. (2018). Entrepreneurship and small and medium-sized enterprises (SMEs). Retrieved December 12, 2023. http://ec.europa.eu/growth/smes_en



2.4 Contribution from Deliverable Description

D1.4.1 (Period 3 – Lead: UL/PP4) – Peer Review and Testing Report – Technical document containing the main results and conclusions of the UAM testing in each project region on 60 companies. The results are described per country and the last chapter of the report outlines the main conclusions from a transnational perspective. In connection with O1.1.

D1.4.2 (Period 2 – Lead: FHK/PP3) – Deployment Action Plan – Technical document containing the description of the testing scenarios and the main steps/actions to perform the testing in the project regions on 60 companies.

D.1.4.3 (Period 1 – Lead: PTP/LP) – Transnational Memorandum of Understanding – Long-term partnership cooperation document signed between 9 PPs and 8 ASPs from 7 countries to ensure the sustainability of the project results as well as a joint action plan for the scale up and exploitation of the GREENE 4.0 results. The Transnational MoU will be for a period of 8 years.



3 Methodology

3.1 Capitalization of Existing Knowledge

3.1.1 Summary of D1.1.1 – Analysis

The GREENE 4.0 project conducted a regional mapping analysis to understand the current state and potential for innovation in the sustainable business sector across CE regions, focusing on SMEs in the manufacturing sector. A comprehensive survey of 422 manufacturing SMEs in 7 CE countries was conducted to develop a holistic view of the level of adoption of green and digital technologies, and the key barriers to further adoption. The survey aimed to understand current adoption rates of green/digital technologies, perceived barriers, risks and uncertainties, future plans and innovation interests, and required resources and support.

The quantitative data indicates that the current level of acceptance of green practices in companies is moderate. On a scale of 1 to 7, the average use of green practices is 3.7, with Slovenia scoring the lowest at 3.2 and Italy the highest at 4.4.

However, the perceived benefits of these practices are quite high. Companies agree that adopting green practices would improve their sustainability (average score: 4.6), reduce waste and improve environmentally friendly production processes (4.3) and increase their ability to 'green' the supply chain (4.3). However, fewer companies believe that these practices would improve the quality of their products (3.9). Perceived benefits are highest in Slovenia (5.2) and Italy (5.1), but lower in Austria (3.8) and the Czech Republic (4.1).

Bridging these adoption gaps requires an understanding of local barriers related to financial constraints, technical skills, poor infrastructure, and change inertia. Without coordinated efforts to educate, incentivize and equip SMEs to innovate, the competitiveness and responsiveness of the entire regional manufacturing ecosystem will lag. Foreign companies dominate value chains. Climate contributions falter.

This imperative catalyzed the launch of the GREENE 4.0 project covering 7 CE countries — Slovenia, Italy, Austria, Germany, Hungary, Poland and the Czech Republic.

Thus, the deployment should take into account all territorial specificities during implementation, recognizing different sectors, different levels of readiness, different territorial specificities, etc.

3.1.2 Summary of D1.2.1 – Methodology

Based on the Regional Mapping Analysis, a methodology was developed to create relevant UAM fit-for-purpose for CE SMEs. The Methodology Report D1.2.1 provides insights on how to develop the UAM including the basic knowledge and consideration to be taken into account:

- Addressing supply chain disruptions
- Developing new value chains
- Promoting innovative solutions for sustainable business models
- Improving user acceptance of green manufacturing

In this objective, the UAM should become a tool that guides and supports manufacturing SMEs in their transition towards sustainability and digitalization. Its importance lies in the integration of participatory principles into established frameworks, ensuring a progressive and seamless transformation process. The model recognizes the importance of removing external barriers while activating internal drivers, fostering a sense of collectivism in promoting sustainability as an opportunity for all.



Furthermore, the UAM is developed according to the 7 categories of enablers/challenges used in the survey (D1.1.1) and inspired from [Barriers and Enablers for the Adoption of Sustainable Manufacturing by Manufacturing SMEs](#), Claudia Lood Alayón, Kristina Säfsten and Glenn Johansson, 2022:

- Organizational, managerial and attitudinal,
- Training, skills and development,
- Technological,
- Financial,
- Informational,
- Market and business context,
- Governmental.

Figure 4 shows the different categories of enablers and challenges regarding the adoption of sustainable manufacturing processes. Each of these categories are studied to create scenarios that should represent most of the SMES manufacturers in CE.

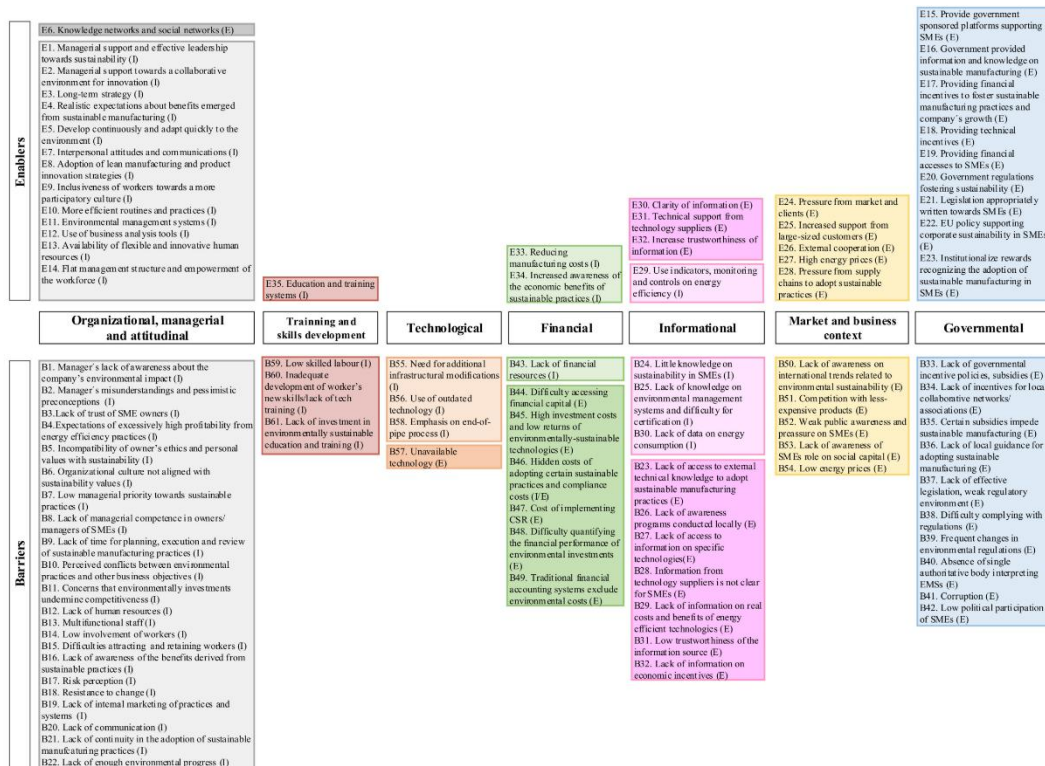


Figure 4: User Acceptance Model Structure Development (Source: Barriers and Enablers for the Adoption of Sustainable Manufacturing by Manufacturing SMEs, Claudia Lood-Alayón, Kristina Säfsten and Glenn Johansson, 2022)

3.1.3 Co-Creation Camps

The development of the UAM is coordinated by 3 PPs: FHK/PP3, UL/PP4 and UJEP/PP5. Each of them organizes a co-creation camp of 2 days, where PPs and transnational stakeholders meet to discuss and co-create the UAM. A combination of external expertise (from different types of stakeholders especially SMEs and policy makers) supports the PPs in developing a relevant User Acceptance Model to be tested. Indeed, a high number of SMEs from the CE territory should be represented through the scenarios developed within the UAM. The Deployment Action Plan should take into account these different scenarios and ensure that each territory tests them according to regional needs. Thus, the three co-creation plans were planned and organized as follows:



- The first co-creation camp organized by FHK/PP3 was divided into two days (23.11.2023 and 04.12.2023) enabling the PPs to
 - (1) re-emphasize and validate the results from D1.1.1 with SMEs and policy makers and
 - (2) cluster the challenges and start reflecting on scenarios establishment. [Hyperlink to the PPs brainstorming on challenges clustering.](#)
- The second co-creation camp organized by UL/PP4 (15-16.01.2024) allowing the PPs to
 - (1) learn from other running projects (ADMA – Horizon Europe, CIRCOTRONIC – INTERREG CE), which are directly connected to UAMs and dealing with new sustainable regulations for SMEs and
 - (2) identify the 7 manufacturing sectoral clusters and match them to identified challenges (from D1.1.1). [Hyperlink to the 7 clusters scenario development files.](#)
- The third co-creation camp organized by UJEP/PP5 (30-31.01.2024) enabling the PPs to
 - (1) have direct review on scenario establishment with SMEs and
 - (2) develop the final UAM to be tested. [Hyperlink to the developments of co-creation camp by UJEP/PP5.](#)

3.1.4 Deployment Action Plan – Background

In today's competitive environment, organizations are under constant pressure to improve their organizational performance (Alexander et al., 2019²). SMEs have a unique set of challenges due to their lack of size and resources when compared to larger organizations. SMEs are not simply smaller versions of large organizations (Russo & Perrini, 2010³). The reality is that the business environment is heterogeneous in nature, which can therefore affect the way in which businesses implement continuous improvement strategies, including sustainable digitalization and greening processes, as demonstrated by the implementation of the survey (D1.1.1 - Regional Mapping Analysis Report). The UAM should be used to demonstrate the benefits of implementing green practices, such as performance assessment tools, profit analysis, return on investment, etc.

3.2 Strategy

3.2.1 UAM

The objective of the UAM is to strengthen supply chains by:

1. Digitization: Implementing digital tools and platforms to improve supply chain visibility, enabling companies to monitor and respond to changes in real time.
2. Diversification: Encouraging SMEs to diversify their supply sources to reduce dependence on a single supplier or region.
3. Collaboration and networking: Facilitate collaboration and networking among companies to share resources, information, and best practices for supply chain management.

² Alexander, P., Antony, J., & Rodgers, B. (2019). Lean Six Sigma for small- and medium- sized manufacturing enterprises: A systematic review. *International Journal of Quality & Reliability Management*, 36(3), 378–397. <https://doi.org/10.1108/IJQRM-03-2018-0074>

³ Russo, A., & Perrini, F. (2010). Investigating stakeholder theory and social capital: CSR in large firms and SMEs. *Journal of Business Ethics*, 191(1), 207–221. <https://doi.org/10.1007/s10551-009-0079-z>



4. Sustainability Integration: Promote the integration of sustainable practices into supply chain operations to ensure long-term viability and resilience.

By implementing these strategies, companies, especially SMEs, are expected to build more resilient supply chains that can withstand various disruptions. The project aims to equip these companies with the knowledge and tools to effectively navigate the complex global supply chain landscape.

3.2.2 Deployment Action Plan

The Deployment Action Plan supports the PPs in implementing the UAM across the 7 CE territories/countries gathered within GREENE 4.0, recognizing the different scenarios while creating consistency across the territories. To support this common effort, 3 online interregional seminars will be organized by FHK/PP3, UL/PP4 and UJEP/PP5 during the testing/implementation phase of the UAM. The objective of the Deployment Action Plan is to provide the most optimal testing phase to enable the delivery of a refined UAM in May 2024.

3.3 Forecast Scenarios and Supporting Ecosystem to be used

3.3.1 Capitalization on D1.1.1 – Survey Implementation

The UAM (D1.3.1) is developed according to the Methodology Report (D1.2.1) and implemented through the Deployment Action Plan (D1.4.2).

The UAM has been originally developed according to a triple entry matrix:

7 functional categories vs. 7 sectoral manufacturing sectors vs. minimum development/digital and digital and green ambition and maturity level. *Figure 5* illustrates this interconnection enabling different scenarios to be developed:

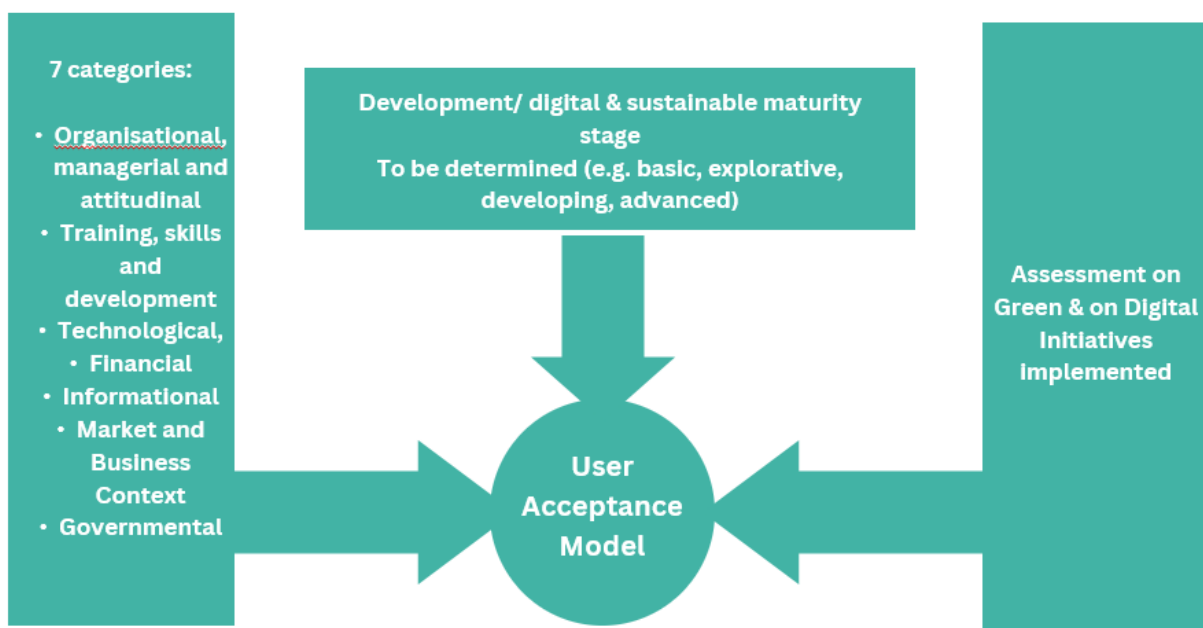


Figure 5: User Acceptance Model - Scenarios development (Source: Project Generated, 2023)

While creating the UAM various characteristics have been studied, i.a. sectoral manufacturing clusters, size/number of employees or turnover, business model, territory, existing structure.



The process of developing the UAM is illustrated in a mural ([GREENE 4.0 Testing Scenarios](#)). The working version of the draft UAM, which will be tested on 10 companies per region can be found [here](#).

3.3.2 UAM Development

Based on the implemented survey (D1.1.1) and the parallel development of the GREENE 4.0 innovation platform (WP2), the UAM tries to understand the acceptance of SMEs in the adoption of green and digital technologies. The technologies are categorized according to Figure 6.

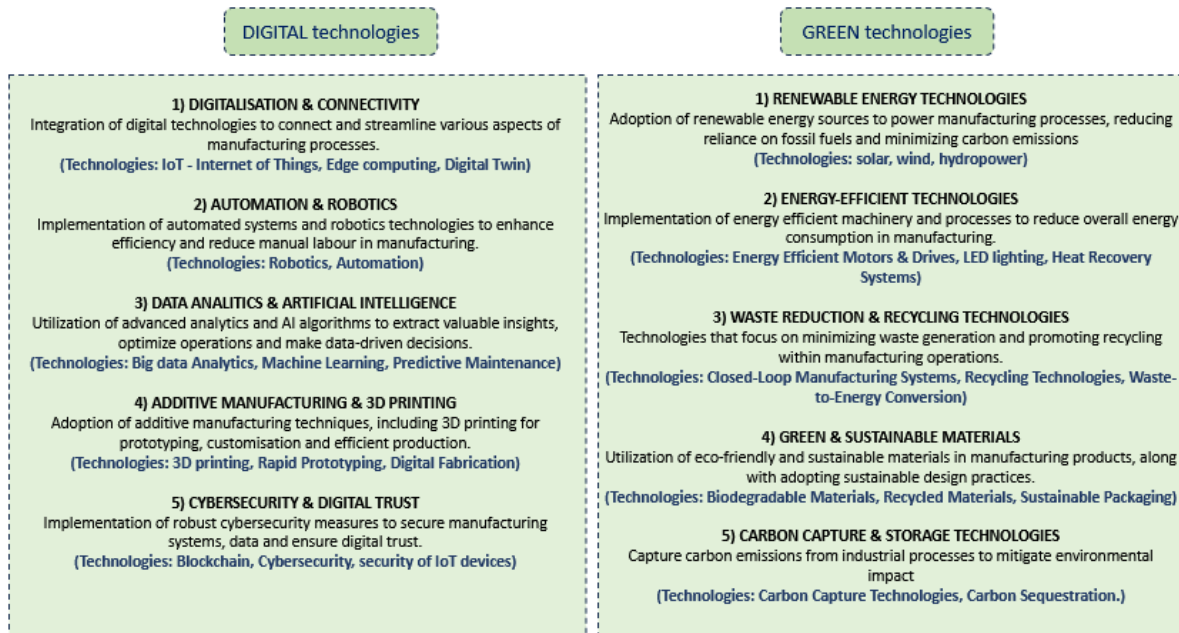


Figure 6: Categorization of Digital and Green Technologies (Source: Project Generated, 2024)

The UAM is then developed to understand at which process within the value chain structure these types of technologies can be implemented within the interviewed SMEs. It is also asked what the targets are for the SMEs to be willing to implement green and digital technologies. The processes within the value chain structure and the targeted value are shown in *Figure 7*.

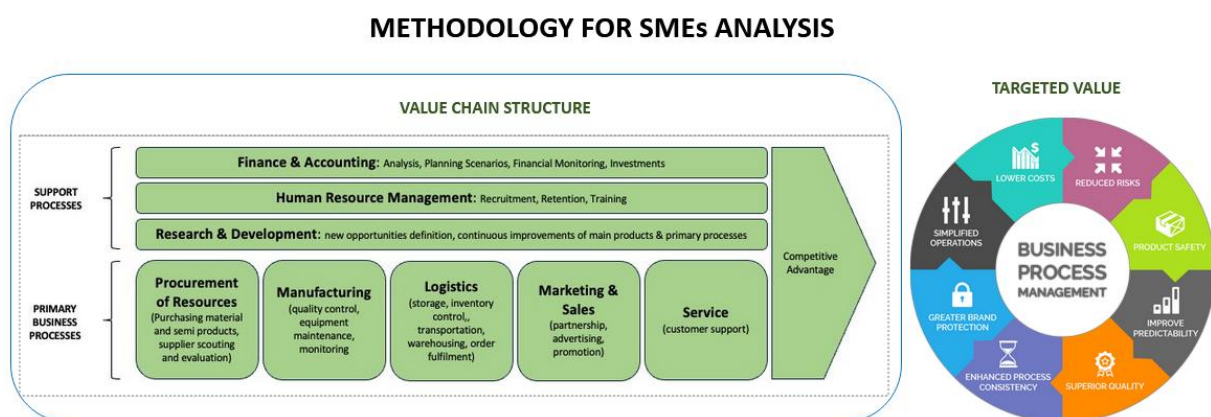


Figure 7: Methodology for SMEs analysis (Source: Project Generated, 2024)

Combining the value chain structure, the maturity levels, showcasing the readiness and possibilities to implement green and digital technologies, and the model implemented through the survey D1.1.1 (7



functional categories: Market and Business, Technological, Managerial, Training and Skills Development, Financial, Governmental, Informational), a final version of the UAM, ready to be tested is established. An extract of the model is shown in *Figure 8* and the final draft UAM can be found [here](#).

GREENE 4.0 Smart and green innovation approaches for scaling up digital transformation opportunities in CE		interreg CENTRAL EUROPE		Co-funded by the European Union	
USER ACCEPTANCE MODEL QUESTIONNAIRE					
Dear Participant,					
<p>this questionnaire is designed to gather insights into the level of digital and green initiatives in your company and their alignment to the goal of the project. Your responses will remain confidential and will only be used for the purposes of the project, in accordance with the Personal Data Protection Regulation (EU 2016/679). Please note that the collected data may be stored and utilized on an online platform accessible solely to project partners during the project's lifecycle. Additionally, beyond the project's duration, the data may be utilized for collaboration with companies that the project partners intend to work with, ensuring the continuation of project objectives. All usage of data will be conducted with utmost discretion and in accordance with applicable data protection laws. Personal data will not be profiled, segmented and transferred to third countries.</p> <p>Below, you will find questions divided into sections relating to different areas of your expertise and your general information. Please ensure that you respond to all requirements and questions.</p>					
1) Please insert background data in the table below					
Company Name					
Company Representative Name and Surname					
Representative Role (i.e. your position in company)					
Company Headquarters (City, Country)					
Representative Email Address					
2) Please assess the level of DIGITAL and GREEN INITIATIVES in your company, each in its own designated column below, on a scale from 1 to 4 based on the definitions of digital and green rating scales.					
Definitions of DIGITAL and GREEN rating scales:					
	1 - BASIC	2 - EXPLORATIVE	3 - DEVELOPING	4 - ADVANCED	
DIGITAL	LIMITED digital INITIATIVES enforced and LOW digital LITERACY. NO AMBITION / ABILITY to digitalize the area.	LIMITED digital INITIATIVES enforced and LOW digital LITERACY. STRONG AMBITION / ABILITY to explore digital opportunities but UNSURE WHERE TO START.	SOME digital INITIATIVES implemented and MODERATE digital LITERACY. AMBITION / ABILITY to INVEST resources for digital transformation.	Digital INITIATIVES EXTENSIVELY LEVERAGED and embedded in core operations. AMBITION / ABILITY to innovate and lead in digital initiatives.	
GREEN	LIMITED green INITIATIVES enforced and LOW sustainability AWARENESS. NO AMBITION / ABILITY to integrate sustainable practices.	LIMITED green INITIATIVES enforced and LOW sustainability AWARENESS. STRONG AMBITION / ABILITY to explore sustainable opportunities but UNSURE WHERE TO START.	SOME green INITIATIVES implemented and MODERATE sustainability AWARENESS. AMBITION / ABILITY to INVEST resources in sustainability initiatives.	Green INITIATIVES extensively LEVERAGED & EMBEDDED in core operations. AMBITION / ABILITY to INNOVATE & LEAD in sustainable practices.	
			Rate the DIGITAL INITIATIVES in your company (on a scale from 1 to 4)	Rate the GREEN INITIATIVES in your company (on a scale from 1 to 4)	
ENVIRONMENT	MARKET AND BUSINESS CATEGORY				
	MARKETING and SALES PROCESS				
	Advertising activities				
	Sales force activities				
	Pricing activities				
	Distribution channels				
	CUSTOMER SERVICE PROCESS				
	Customer support activities				
	Warranty service process activities				
	Maintenance and repair activities				



INTERNAL ENVIRONMENT	INBOUND AND OUTBOUND LOGISTICS PROCESS		
	Material RECEIVING process activities (quality check, performance delivery, etc.)		
	Material STORING process activities (physical, document flow, etc.)		
	Material DISTRIBUTION process activities (reducing time, predictability, etc.)		
	Final product STORING process activities		
	Final product DISTRIBUTION process activities		
	Final product DELIVERY process activities (tracking, etc.)		
	TECHNOLOGICAL CATEGORY		
	MANUFACTURING OPERATIONS PROCESS		
	PRODUCTION ERROR checking system		
	Production PLANNING system		
	MATERIAL CONSUMPTION control system		
	MAINTENANCE PREDICTION system		
	Improve finished product inventory TRACKING SYSTEMS		
	Manufacturing process optimisation with DATA ANALYTICS & AUTOMATION		
	PACKAGING activities		
	Final product QUALITY TESTING activities		
	Measuring ENERGY EFFICIENCY		
	Measuring WASTE PRODUCTION		
	ORGANISATIONAL AND MANAGERIAL CATEGORY		
	INFRASTRUCTURE, ORGANISATION AND MANAGEMENT		
	Company WIDE SYSTEM (TQM, ISO, TS, other certificates, etc.)		
	Ensure compliance with UPCOMING REGULATION		
	MEASURING SYSTEMS of key company KPIs		
	FINANCE and ACCOUNTING support activities		
	TRAINING AND SKILLS DEVELOPMENT CATEGORY		
	HUMAN RESOURCE MANAGEMENT PROCESS		
	RECRUITING process activities		
	"EMPLOYEE EFFICIENCY & REWARD" measuring system		
	Use of VISUAL MANAGEMENT or AIDS		
	TRAINING PROCESS for new workers		
	HRM MANAGEMENT process		
	FINANCIAL CATEGORY		
	INVESTMENT & FINANCING PROCESS		
	MARKET RESEARCH process		
	Improving SCOUTING PROCESS for new innovations		
	"COST-BENEFIT analysis" process		
EXTERNAL ENVIRONMENT	GOVERNMENTAL CATEGORY		
	IMPACT FROM GOVERNMENT		
	REGULATORY COMPLIANCE processes		
	Access to FAVOURABLE FUNDING (grants, etc.)		
	Improving ETHICAL BUSINESS PRACTICES within a company		
	INFORMATIONAL CATEGORY		
INFORMATION FLOW			
	INFORMATION FLOW SYSTEM with employees		
	DATA SECURITY & PRIVACY process (data management, regulatory, cybersecurity)		
	DATA ANALYTICS & INSIGHTS processes (advanced analytic tools, etc.)		

Figure 8: Final UAM to be piloted and tested



4 Practical Steps to test the UAM – Processes and Timeline

4.1 UAM Test Definition and Strategy Process

The UAM will be tested and piloted in at least 60 SMEs in different contexts to assess its effectiveness in real-world scenarios. The feedback gathered during this phase will help to refine the model and ensure that it adapts effectively to different manufacturing environments.

By improving user acceptance, the project aims to accelerate the integration of green and digital technologies in the manufacturing sector. This integration is expected to lead to improved operational efficiency, reduced environmental impact, and increased competitiveness for SMEs.

The success of the UAM in improving user acceptance will be a critical factor in the overall impact of the GREENE 4.0 project. It will determine the extent to which SMEs can move towards more sustainable and technologically advanced practices. The GREENE 4.0 project highlights the importance of user acceptance in the transition to green and digital manufacturing. Through the development of a tailored methodology, practical tools, and stakeholder collaboration, the project aims to create a supportive environment for SMEs to adopt and effectively implement green and digital technologies.

4.2 UAM Test Process

The strategic process for the development of the UAM test process is triggered by the preparation of two preliminary reports: D1.2.1 – Methodology Report and D1.4.2 – Deployment Action Plan. The overall objective is to be able to deliver the UAM finalized to the CE SMEs manufacturers in May 2024. The [GREENE4.0 Monitoring Tool](#) is the reference to showcase the criticality of each activity.

PPs meet with the EAB on December 18th to validate the methodology report and present the deployment action plan:

- EAB provides feedback on how to improve the methodology and the action plan,
- Each PP ensures that their associated EAB members attend this meeting.

Following the EAB validation process, the following process steps occur:

1. FHK/PP3, UL/PP4 and UJEP/PP5 coordinate the WP1 activities towards the creation of the UAM:
 - a. 3 co-creation camps support this development (FHK/PP3 in Nov/Dec, UL/PP4 in Jan, UJEP/PP5 in Jan/Feb). Each co-creation camp will build on the previous ones to deliver a first version of the UAM.
2. The deployment action plan is triggered by the first draft of the UAM delivered by February 2024.
3. The UAM is tested in the 7 countries represented in GREENE 4.0, starting in March 2023, led by the following partners:
 - a. PTP/LP, leading the test in Slovenia,
 - b. TGZ/PP2, leading the test in Germany,
 - c. FHK/PP3, leading the test in Austria,
 - d. ICUK/PP6, leading the test in Czechia,
 - e. IMECH/PP7, leading the test in Italy,
 - f. KPT/PP8, leading the test in Poland,



g. IFKA/PP9, leading the test in Hungary.

4. Each country must:

a. Select 10 SMEs to present the UAM to, and complete the UAM test:

- i. PPs must select 10 SMEs that were originally targeted during the regional mapping analysis, to ensure base-line data is available.
- ii. PPs must select SMES from 3 or more sectors relevant for their territory; it is recommended PPs review their Regional Innovation Valley Priorities and/or Smart Specialization Priorities to help guide this process.
- iii. It is recommended that PPs discuss the UAM test candidates with BSOs (e.g. Digital Innovation Hubs) and ASPs to select the best organizations to focus the test on.
- iv. Territorial leads are asked to upload the names of the 10 companies, they intend to test the UAM with, [here](#) by Week 5.

b. With the other PPs, participate in the definition of 7 sectoral manufacturing clusters and attribute leads (each PP leads on one sector and contributes to a minimum of 2 additional as a co-lead).

c. PPs identify the relevant scenarios for each manufacturing cluster according to chosen companies. Each testing territory needs to determine the regional needs to test the UAM ensuring that the scenario represents SMEs' needs.

- i. Note 1: The process to link individual SMEs' needs to the portfolio of testing scenarios will emerge following the completion of the UAM First Draft (D1.3.1 - [WP1_UAM_questionnaire&guidelines](#)).
- ii. Note 2: It is recommended that only the most relevant thematic categories are worked through with the SMEs to ensure their interest is maintained during the testing process.

d. PPs prepare to deploy the UAM test. UJEP/PP5 hosts a joint online workshop to present the deployment action plan, all updated templates, fact sheets, and a simulation of the testing process (Week 10).

e. Deploy the relevant UAM testing scenarios with 60 SMEs.

- i. Each territory lead is asked to coordinate a territorial process to contact and engage with each of the 10 chosen SMEs.
- ii. It is recommended that the contact approach starts on March 11, 2024.
- iii. The testing process will last until April 15, 2024, therefore early and sustained engagement with the companies is recommended.
- iv. During the test meeting with the selected SMES, PPs will present:
 1. The project ([InterregCE_GREENE4.0_project-presentation.pptx](#)),
 2. The UAM (a detailed and simple description will be included in the Working Paper 1.3.1 by March 8, 2024).

f. Ensure the potential for feedback on the UAM:



- i. Each territory lead reports on each of the test by completing the attached template⁴ (attached in Annex and uploaded [here](#)). Each territory lead ensures there is one feedback template per SME uploaded into the [relevant folder on the shared MStems](#).
- ii. PPs exchange on their tests through 3 online seminars and start refining the UAM.
 1. Schedule of meetings:
 - a. 1st Seminar: Hosted by FHK/PP3, beginning of March (Week 12) to share early good practice exchanges on first tests and address any critical challenges PPs faced in deployment.
 - b. 2nd Seminar: Hosted by UL/PP4 mid-March (Week 13) during the Bergamo PPs meeting, to get mid-term feedback on testing process addressing any challenges faced by the partners and refining any messages and tools used in the testing process.
 - c. 3rd Seminar: Hosted by UJEP/PP5, beginning April (Week 15). All tests should be completed by this point. The purpose is to start the formal refining process, and co-creation of D1.4.1 (UAM) with the inputs of all the PPs testing templates.
 2. Purpose of the meetings:
 - a. Meetings will help share testing experiences and overcome challenges,
 - b. Meetings will help refine the testing scenarios and 'recipes' provided meet the needs of SMEs,
 - c. Meetings will be used to ensure that the testing process is performed in a timely manner across all territories.
 3. Meeting Preparation: At least one representative of each PP is expected to attend the three seminars with the 'homework' completed to ensure efficient exchange:
 - a. 1st Seminar: The template for the first feedback will be distributed one week in before the 1. seminar Note: It is recommended that each PP has tested the model with 3 SMEs before this meeting.
 - b. 2nd seminar: The template for triggering testing challenges will be provided to the PPs by the end of the first seminar. Note: It is recommended that PPs test the UAM with 3 additional SMEs ahead of the 2nd seminar.
 - c. 3rd Seminar: The template for analyzing the results from each territory will be circulated to the PPs during the second seminar. Note: Each PP must have a total of 10 SMEs who have tested the UAM + all 20 templates (10 excel and 10 words document) uploaded in the appropriate folders on the shared drive.
- g. Improve and refine the UAM to create long-lasting results:

⁴ Note: The Template for UAM review is subject to change until the end of February, due to the development status of the User Acceptance Model Working Paper (Draft 1.3.1). Please ensure you use the Shared Drive Template which will have the most up-to-date version available. Official Template will be notified to the PPs by email when it is ready.



- i. PPs finalize all templates by Week 15, as contribution to D1.4.1.
 - ii. UL/PP4 creates draft of D1.4.1 by Week 17, to circulate before the Transnational Workshop which clarifies key outcomes and demonstrates the update process expected for the UAM (Working Paper 1.3.1) to be finalized.
 - iii. PPs participate in Transnational Workshop (led by UL/PP4) in Week 18 to peer-review and analyze the testing results. Draft key findings towards the UAM update process will be presented.
- h. FHK/PP3 will organize a Co-design workshop after testing and piloting process in May 2024 to finalize and deliver the developed UAM.

4.3 Timeline Overview

Table 1 shows the critical path to ensure timely completion of the activity in accordance with AF expectations. Responsibilities are defined and assigned according to the RACI methodology (R: Responsible, A: Accountable, C: Consulted, I: Informed). This timeline overview is only a recommendation to meet the milestone of delivering the UAM until May. However, it is subject to change due to any circumstances agreed by the consortium.

Table 1: Timeline Overview

Task to achieve	Deadline	Responsibilities (RACI methodology)
D1.2.1 – Methodology Draft Report issued and validated by EAB	December	R: UL/PP4, A: all PPs, C: EAB
D1.4.2 - Deployment Action Plan drafted and feedback from EAB	December	R: FHK/PP3, A: all PPs, C: EAB
Co-creation camps implementation	January	R: FHK/PP3/ UL/PP4, UJEP/PP5, A: all PPs, C: transnational stakeholders
D1.3.1- User Acceptance Model drafted, alongside all support material (factsheets, PowerPoints)	February (5 days in advance of Joint Workshop)	R: UL/PP4, FHK/PP3, UJEP/PP5, A: all PPs
D1.4.2 - Deployment Action Plan issued, with EAB updates included	February (5 days in advance of Joint Workshop)	R: FHK/PP3, A: all PPs
SMEs engagement within the 7 territories – each territory identifies 10 SMEs to test the UAM. TestCompanies_UAM.xlsx	February (Week 5-7) (by joint workshop)	R: FHK/PP3, UL/PP4, UJEP/PP5, A: all PPs, C: transnational stakeholders
Online joint video technical meeting for briefing the conclusions from the co-creation camps and draft the piloting and testing version of the UAM	February (Week 9)	R: UL/PP4, FHK/PP3, UJEP/PP5, A: all PPs



Online joint workshop to present the Deployment Action Plan.	March (Week 10)	R: UJEP/PP5, FHK/PP3, A: all PPs
3 interregional seminars 1 st – Online, hosted by FHK/PP3 2 nd – Physical during PPs meeting in Bergamo, hosted by UL/PP4 3 rd – Online, hosted by UJEP/PP5	April (Week 12, Week 13 & Week 15)	R: FHK/PP3, UL/PP4, UJEP/PP5, A: all PPs, C: transnational stakeholders
Each Territory implements the UAM with minimum 10 SMEs	April (by Week 15)	R: PTP/LP, TGZ/PP2, FHK/PP3, ICUK/PP6, IMECH/PP7, KPT/PP8, IFKA/PP9 A: UL/PP4, UJEP/PP5
Each country fill-in minimum one template word AND one template excel per SME test, which is a formal contribution to the D1.4.1 Report on Testing. 70 contributions in total from all Territories, minimum and upload them in their country folder: WP1 - A1.4 - UAM Testing implementation	April (Week 15)	R: FHK/PP3, A: all PPs
D1.4.1 - Transnational workshop supporting the delivery of the Report on Testing	April (Week 17)	R: UL/PP4, A: all PPs, ASPs
D1.4.1 – Final version of the Peer review and testing report issued	April (Week 18)	R: UL/PP4, A: all PPs
D1.3.1. – Co-Design Workshop organized by FHK/PP3 to finalize the UAM	May (Week 20)	R: FHK/PP3, A: all PPs
D1.3.1 -draft Final version of the UAM issued to the Partnership for final review	May (Week 20)	R: UL/PP4, A: all PPs
D1.3.1 – Partnership final commentary integrated into the UAM Final	May (Week 21)	R: UL/PP4, A: all PPs
EAB Validation Meeting on UAM Final (1.3.1)	May (Week 22)	R: UL/PP4, A: all PPs, C: EAB

4.4 Role and Responsibilities and Stakeholder Engagement

4.4.1 Project Partners

Each PP has supported the development of the Regional Mapping Analysis Report through the implementation of the survey (D1.1.1) and now participates in the elaboration of the UAM (3 co-creation camps).

The UAM is first tested by each territory under the lead of PTP/LP, TGZ/PP2, FHK/PP3, ICUK/PP6, IMECH/PP7, KPT/PP8 and IFKA/PP9 among at least 60 companies.

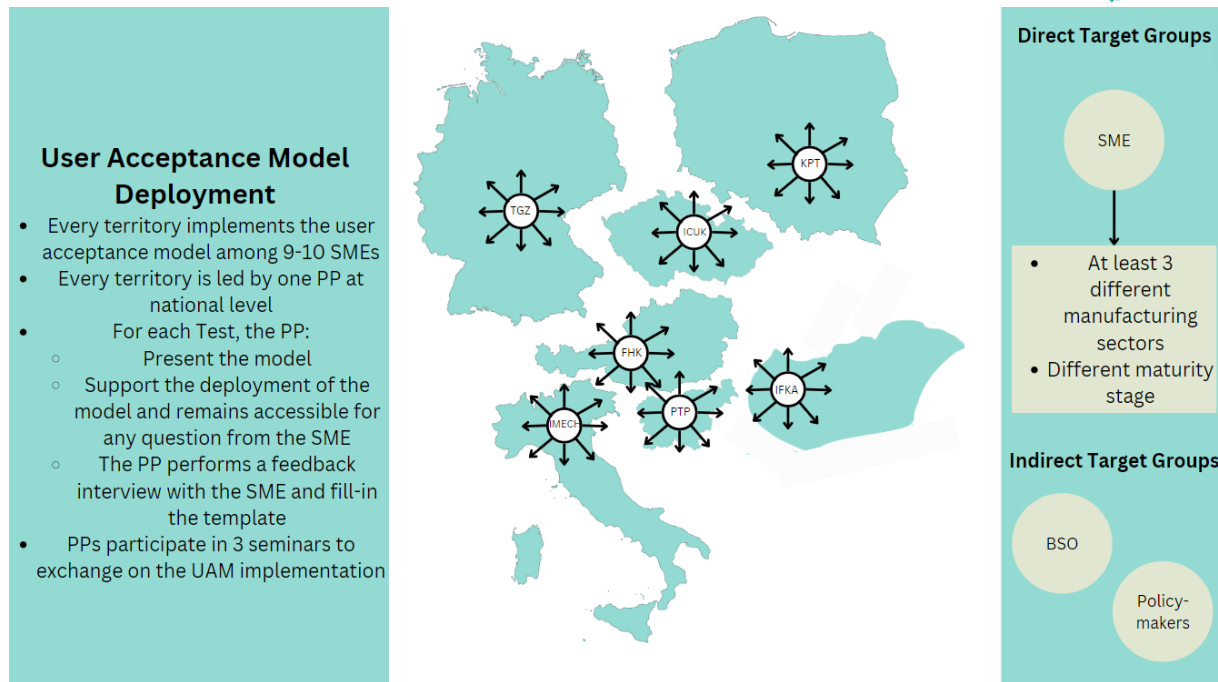


Figure 9: Target groups of each territory lead (Source: Project Generated, 2023)

- Each territory must test the UAM on at least 10 SMEs.
- For each test 2 templates must be filled in:
 - An excel file representing the UAM: [UAM Questionnaire and Guidelines](#)
 - A feedback template allowing the PPs and the interviewees to reflect on the test:
 - > Part 1 (to be done before the interview) – Administrative information: PPs gather important information to lead on the interview/test.
 - > Part 2 (to be done after the interview) – Interviewee Reflection: Reflection on the UAM test identifying potential gaps, challenges and emphasizing the most important categories when it comes to digital acceptance.
Note: To avoid the interviewee feeling the burden of this feedback loop, let them reflect on their 3 most interesting categories + closing remarks. Let them choose the 3 categories they would like to reflect on over the 7 functional categories: Market and Business, Technological, Managerial, Training and Skills Development, Financial, Governmental, and Informational.
 - > Part 3 (to be done after the interview) – Reflection of the PP who conducted the interview: The aim is to prepare their contribution to the 3 interregional seminars and to optimize the UAM until the final delivery in May (to be presented to the EAB).
- These two templates should be uploaded to SharePoint: [WP1 - A1.4 - UAM Testing implementation](#). Thus, in each country folder, we should have 20 (10 word and 10 excel) templates by the end of the testing period.
- Each PP should attend the 3 interregional seminars and bring input to their test.
- Each PP should be willing to contribute to the creation of a user acceptance model that meets the needs of SMEs in CE.



4.4.2 Testing SMEs

PPs have already contacted relevant SMEs for the implementation of the survey. Moreover, from the co-working seminar organized by FHK on October 5, 2023 on the elaboration of the deployment and testing scenarios, PPs have already started to identify SMEs they could engage for this testing/execution of the UAM phase.

These SMEs should first be approached with a presentation of the project, showing the benefits of the project. Link to the presentation to use or to adapt: [InterregCE_GREENE4.0_project-presentation.pptx](#)

4.4.3 Supporting Ecosystem to be Used

The User Acceptance Model should not only be tested among 10 SMEs/country but should also be widely disseminated among the GREENE4.0 community. This community has been created through the survey (D1.1.1) but also through the communication strategy. Key stakeholders, such as DIHs and policy makers, should be addressed.

4.4.4 Example of Implementation in Austria by FHK/PP3

This section provides example on how the UAM is planned to be tested in Austria under the lead of FHK/PP3.

1. FHK/PP3 has identified 15 potential SMEs (who participated in D1.1.1) to test the UAM in a central document to support all PPs identifying the SMEs within their territories to test the UAM: [TestCompanies_UAM.xlsx](#)
2. FHK/PP3 with the support of UL/PP4 extract the data from the survey (D1.1.1) and complete part 1 of the feedback template for each of these SMEs. [Feedback template on UAM test.docx](#)
3. FHK/PP3 contacts 5 companies to test the UAM with 3-5 companies ahead of the 1st interregional seminars and fill in 3 excel templates and 3 word templates associated to these 3 interviews (and upload them to their folder on the shared drive).
4. FHK/PP3 organizes the first interregional seminar in week 12 where all PPs gather and provider initial feedback on their tests.
5. FHK/PP3 refines the feedback template according to PPs feedback and if needed issue a new feedback template.
6. FHK/PP3 organizes 3 new interviews with SMEs surveyed from D1.1.1 and fills in the according templates (and uploads them to their folder on the shared drive).
7. FHK/PP3 participates in the 2nd interregional seminars during the PPs meeting in Bergamo (week 13) and moderated by UL/PP4.
8. FHK/PP3 runs 4 more interviews and fills in the appropriate templates (and uploads them to their folder on the shared drive).
9. FHK/PP3 participates in the 3rd interregional seminars organized by UJEP/PP5.



5 Feedback from EAB and Further Procedure

On the December 18, 2023, a final version of the methodology (D1.2.1) as well as a draft of the deployment action plan (D1.4.2 – which will be issued as soon as the first version of the UAM is ready to be tested) is presented. Regarding the deployment action plan, the following questions/feedback are asked and presented during the meeting.

1. SMEs Outreach:
 - a. Definition: Requirements for identification of appropriate SMEs to participate in testing phase and be compliant with the application form requirements and development perspectives of GREENE 4.0.
 - b. GREENE 4.0 Position Statement: Each PP engages further with 10 chosen SMEs that have already participated in the mapping analysis (D1.1.1).
 - i. Each PP engages with 9-10 SMEs, ensuring the SMEs were surveyed during the Regional Mapping Analysis, so base data exists.
 - ii. Each PP ensures that SMEs represent multiple sectors critical for CE regional development (Smart Specialization or Regional Innovation Valley clustering should be vital to this analysis).
 - iii. Each PP ensures they review the surveys filled in by the chosen companies ahead of running the testing of the UAM with them. It is recommended that each PP develops one slide for each testing SME providing some sort of analysis between the chosen SME and the mapping analysis (either at national or CE level).
2. Sectoral clusters to be represented within the UAM:
 - a. Definition: Requirements for aligned sectoral or value-chain considerations to be compliant with the application form requirements and development perspective of GREENE 4.0.
 - b. GREENE4.0 Position Statement: 7 key manufacturing sectoral clusters for CE need to be identified within the project and embedded in the development of the platform. However, after exploring which clusters to focus on, it was established that the UAM structure would not change according to the sectors, the solutions and technologies would though change. Thus, key manufacturing clusters have been identified but will only be locked in WP2 while developing the tools and the platform.
3. Methods to create consistency between territories and cross-territorial learnings:
 - a. Definition: Requirements for specific meetings (timeline) to promote exchange between territories on the experience they have during the testing process, and final validation from the EAB.
 - b. GREENE 4.0 Position Statement:
 - i. A timeline is presented to the EAB to coordinate inputs from the Working Paper (1.3.1) to D1.4.2 finalization and presentation to the Partnership during a Joint Workshop in February (week 5-7)
 - ii. A timeline is presented to the EAB to coordinate outputs from the Test Process towards D1.4.1 (testing feedback), to promote improvements to D1.3.1 (Final User Acceptance Model) in May (Week 22), to an EAB validation meeting.
4. Testing Scenarios:
 - a. Definition: Testing Scenarios which cluster the SMEs according to similar needs across



- i. (1) the 7 thematic categories,
 - ii. (2) different maturity stage and
 - iii. (3) the business stages/value chain stages.
- b. GREENE4.0 Position Statement: A slide is presented to the EAB to showcase this triple entry matrix as well as create reflection on potential other characteristics to consider.



6 Conclusion

The purpose of this document has been to provide a holistic overview of how to implement the UAM including information on the due dates, responsibilities, and the intent behind the next deliverables D1.4.1 - Peer Review and Testing Report & D1.3.1 – User Acceptance Model.

All PPs must provide feedback on the process outlined in this guidance document, to ensure that they understand the hand-off process that will occur between deliverable 'guidance development and delivery' (D1.4.2) and deliverables 'report development' (D1.4.1, D1.3.1).

According to the process developed in this guidance, the monitoring of 'in-activity' will be the collective responsibility of the three lead partners in WP1 (FHK/PP3, UL/PP4 and UJEP/PP5) and will take place during the project meetings.

Each PP is required to contribute actively to all deliverables in the WP and meet all fixed deadlines. The Management and Communication leader (PTP/LP) is responsible to trigger the Communication items connected to the UAM development and expansion.



Annex

This template enables the PPs to provide harmonized feedback to improve and refine the UAM tested among a minimum of 60 companies in 7 different countries. This template will evolve until the UAM is ready to be tested. This template will then be revised during each interregional seminar organized during the testing phase. This template can also be found here: [Feedback template on UAM test.docx](#).

The template will not feed input into the GREENE 4.0 platform but will be filled in to get feedback on the UAM and the overall testing phase. This way the UAM can be adjusted to company's needs.

EXECUTION OF THE FIRST VERSION OF THE USER ACCEPTANCE MODEL	
The overall objective is to get feedback on the first version of the User Acceptance Model (UAM) to refine it and deliver a final UAM by May fitting the specific needs of SMEs in Central Europe.	
PART 1 – ADMINISTRATIVE INFORMATION	
Company Name	
Sector	
Country	
Region	
Prioritization of Categories	
PART 2 – USER ACCEPTANCE TEST – INTERVIEWEE FEEDBACK	
MARKET AND BUSINESS CATEGORY	
SMEs assessment – Scenario identification	
Are there any processes that you would add in this category?	
Do you feel represented by the rating scales?	
What are your main challenges to implement digital and green technologies in this category?	
What are the main enablers in relation to these challenges?	
Do you already see the cost-benefits to implement digital and green technologies? If yes, in which areas?	
TECHNOLOGICAL CATEGORY	
SMEs assessment – Scenario identification	
Are there any processes that you would add in this category?	
Do you feel represented by the rating scales?	
What are your main challenges to implement digital and green technologies in this category?	



What are the main enablers in relation to these challenges?	
Do you already see the cost-benefits to implement digital and green technologies? If yes, in which areas?	
ORGANISATIONAL AND MANAGERIAL CATEGORY	
SMEs assessment – Scenario identification	
Are there any processes that you would add in this category?	
Do you feel represented by the rating scales?	
What are your main challenges to implement digital and green technologies in this category?	
What are the main enablers in relation to these challenges?	
Do you already see the cost-benefits to implement digital and green technologies? If yes, in which areas?	
TRAINING AND SKILLS DEVELOPMENT CATEGORY	
SMEs assessment – Scenario identification	
Are there any processes that you would add in this category?	
Do you feel represented by the rating scales?	
What are your main challenges to implement digital and green technologies in this category?	
What are the main enablers in relation to these challenges?	
Do you already see the cost-benefits to implement digital and green technologies? If yes, in which areas?	
FINANCIAL CATEGORY	
SMEs assessment – Scenario identification	
Are there any processes that you would add in this category?	
Do you feel represented by the rating scales?	
What are your main challenges to implement digital and green technologies in this category?	
What are the main enablers in relation to these challenges?	

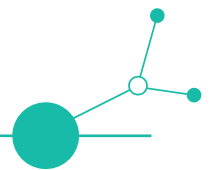


Do you already see the cost-benefits to implement digital and green technologies? If yes, in which areas?	
GOVERNMENTAL CATEGORY	
SMEs assessment – Scenario identification	
Are there any processes that you would add in this category?	
Do you feel represented by the rating scales?	
What are your main challenges to implement digital and green technologies in this category?	
What are the main enablers in relation to these challenges?	
Do you already see the cost-benefits to implement digital and green technologies? If yes, in which areas?	
INFORMATIONAL CATEGORY	
SMEs assessment – Scenario identification	
Are there any processes that you would add in this category?	
Do you feel represented by the rating scales?	
What are your main challenges to implement digital and green technologies in this category?	
What are the main enablers in relation to these challenges?	
Do you already see the cost-benefits to implement digital and green technologies? If yes, in which areas?	
CLOSING REMARKS FOR INTERVIEWEE	
What were the most interesting parts you have experienced while testing the user acceptance model?	
What is the topic/category you would like to have more elaborated on?	
Any further remarks that should be considered in this feedback round?	
Did this UAM help you understand where to use green and digital technologies? If yes, how?	
Does it support your willingness to integrate digital and green technologies?	



PART 3 – USER ACCEPTANCE TEST – PP FEEDBACK	
How did the testing go? Was the process easy to run?	
What were the most interesting parts you have experienced while testing the user acceptance model?	
What could be improved in the UAM? What could be emphasized? Or removed?	
Should we have additional categories the interviews should reflect during the feedback time?	
Any further remarks that should be considered in this feedback round?	

Annex 1



D.1.4 – Deploy and test user acceptance model





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B. External advisory board	7

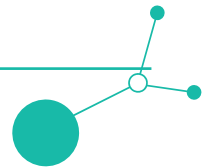
A. Co-working seminar

CO-CREATION CAMP KUFSTEIN, AUSTRIA

Event report

WP1 Design, test and deploy a user acceptance model

Activity 1.4 Deploy and test user acceptance model



10.11.2023

Partner:	FH Kufstein Tirol
Contact Person:	Prof. (FH) DDr.Mario Situm, MBA, Mario.Situm@fh-kufstein.ac.at

Title of Event:	Co-working seminar to start elaborating the deployment plan and identify the target groups (companies)
Date:	05.10.2023_09:15-11:30
Venue:	FH Kufstein Tirol
Language:	English
Type of Event:	Speed networking Sessions
No. of Attendees	29 persons representing 9 Project Partners





Summary of the event (max 500 characters)

PP3/FHK organised a co-working seminar in Tirol to elaborate the Deployment Plan and testing scenarios for the target group (companies) associated with A1.4. In close cooperation with PP4 (UL) & PP5 (UJEP), PP3 (FHK) created a speed networking session aimed at

- capitalising on the questionnaires implementation (associated to A1.1)
- identifying synergies between Partners and determining common interests to determine the focused manufacturing clusters
- Exchange on potential companies able to test the User Acceptance Model
- Start ideating on the testing scenarios.

All 9 PPs were represented within this speed networking sessions and bilaterally exchanges with each other (10min per bilateral meetings – 8 meetings). Most of the notes have been digitalised and uploaded on a common digital board to enable further capitalisation ([Hyperlink to the Boards on Mural](#))

Final Agenda (English Version)

AGENDA		
Time	Activity	Speaker
9:15-9:35	Presentation of the Deployment Action Plan Concept	UL
9:35-9:45	Presentation of activity	FHK
9:45-11:15	Speed Networking sessions	All PPs
11:15-11:30	Closing Statements	FHK



Photos / Screenshots

WORKING SESSION 1

PP1	ICUK & UEP	PP2	MECH	UPT	PP3	TIC	IA
<p>PP1 - System - Robotics - Digitizing business & HR - Cybersecurity - Construction</p>	<p>ICUK & UEP - Administration - Manufacturing & construction associated to medical - Construction - Administration - Healthcare & travel companies - Research & development associated to medical equipment</p>	<p>PP2 - System - Robotics - Digitizing business & HR - Cybersecurity - Construction</p>	<p>MECH - Energy - Chemistry (cosmetics) - Mechanical engineering - EDH CTU (Czech Technical University)</p>	<p>UPT - Energy - Chemistry (cosmetics) - Mechanical engineering - EDH CTU (Czech Technical University)</p>	<p>PP3 - System - Robotics - Digitizing business & HR - Cybersecurity - Construction</p>	<p>TIC - Administration - Manufacturing & construction associated to medical - Construction - Administration - Healthcare & travel companies - Research & development associated to medical equipment</p>	<p>IA - Administration - Manufacturing & construction associated to medical - Construction - Administration - Healthcare & travel companies - Research & development associated to medical equipment</p>

Additional notes - Co-working session 3

PP1	MECH	UPT	PP3	ICUK & UEP
<p>Round 3 - TIC - Technologies und 7 Zentrum Round 3 - IHSU - Solution provider Round 4 - IMECH - Industry, manufacturing - Plastic - Metal - Mechatronics - Tool, construction, recycling Round 8 - ICUK - 7 Centre of USTJ region</p>	<p>PP1 - System - Robotics - Digitizing business & HR - Cybersecurity - Construction</p>	<p>Automation in agriculture (PP2) Logistics (PP3) Automation (PP3) - needs in robotics Digital printing (PP3) PP3 - Czech main sectors - Energy - Chemistry (cosmetics) - Mechanical engineering - EDH CTU (Czech Technical University)</p>	<p>PP3 - System - Robotics - Digitizing business & HR - Cybersecurity - Construction</p>	<p>ICUK & UEP - Administration - Manufacturing & construction associated to medical - Construction - Administration - Healthcare & travel companies - Research & development associated to medical equipment</p>

Figure 1 - Screenshot of Synergies identified by the PPs



Figure 2 - Visualisation of the Speed Networking Session



Signature List / Online attendance sheet

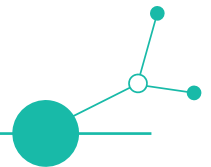
No.	Name	Organization	Country	E-mail	Signature
1.	Achs Petr	Innovation Centre of Usti Region	Česko (CZ)	Achs@icuk.cz	
2.	Besnard Mathilde	University of Applied Sciences FH Kufstein Tirol	Österreich (AT)	Mathilde.besnard@mindconsult.com	
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28.	Woźniak Urszula	Krakov Technology Park Ltd.	Polska (PL)	Uwozniak@kpt.krakow.pl	
29.	Zrim Borut	Pomurje Technology Park	Slovenija (SI)	Borut@p-tech.si	



B. External advisory board

1ST INTRODUCTORY MEETING OF EXTERNAL ADVISORY BOARD

Event report



WP1: Design, test and deploy user acceptance model

A1.4: Deploy and test user acceptance model

20. 12. 2023

Partner:	Pomurje Technology Park
Contact Person:	Sarah Vidmar

Title of Event:	1ST INTRODUCTORY MEETING OF EXTERNAL ADVISORY BOARD
Date:	18. 12. 2023
Venue:	Online - Zoom
Language:	English
Type of Event:	External Advisory Board meeting
No. of Attendees	27



Summary of the event (max 500 characters)

The meeting began with the Lead Partner's presentation of the objectives, the foreseen results of the project and the anticipated work timeline. Next, University of Ljubljana presented the first deliverable to be validated by External Advisory Board – D1.2 – Methods and measures for improving user acceptance. Next, University of Applied Sciences Kufstein presented the rough structure of second deliverable to be validated by External Advisory Board – D1.4 - Deploy and test user acceptance model to gain feedback on the methodology to create the User Acceptance Model (UAM). This presentation only provided the main guidelines on how partners plan to implement/test the User Acceptance Model (UAM) as the final version of the deployment action plan was due in Period 2.

Final Agenda (English Version)

AGENDA		
Time	Activity	Speaker
11:00-11:05	Welcome and Introduction	Maja Sušec, Greene 4.0 Project Manager, Pomurje Technology Park, Slovenia
11:05-11:10	Overview of GREENE 4.0 Project	Maja Sušec, Greene 4.0 Project Manager, Pomurje Technology Park, Slovenia
11:10-11:20	Presentation of Methods and Measures for Improving User Acceptance	Catalin Ilie, University of Ljubljana, Slovenia
11:20-11:30	Validation Discussion	All participants, moderator: Catalin Ilie, University of Ljubljana, Slovenia
11:30-11:40	Presentation of Deployment Action Plan and Testing Scenarios	Mathilde Besnard, University of Applied Sciences FH Kufstein Tirol, Austria
11:40-11:50	Validation Discussion	All participants, moderator: Mathilde Besnard, University of Applied Sciences FH Kufstein Tirol, Austria
11:50-11:55	Next Steps and Future Collaborations	Maja Sušec, Greene 4.0 Project Manager, Pomurje Technology Park, Slovenia
11:55-12:00	Q&A	





Photos / Screenshots

Quantitative & Qualitative Sustainable Assessment

Criteria – Building the testing scenarios

7 categories:

- Organisational, managerial and attitudinal
- Training, skills and development
- Technological, Financial
- Informational
- Market and Business Context
- Governmental

Development/ digital & sustainable maturity stage
To be determined (e.g. limited, organised, digitized, connected, optimized)

7 sectoral manufacturing clusters:
To be defined according to SMEs manufacturers in Central Europe

User Acceptance Model

Projects method - Creating consistency & exchange

Create

- Co-creation camp 1
- Co-creation camp 2
- Co-creation camp 3

Execute/ Test

- Seminar 1
- Seminar 2
- Seminar 3

Sustain

- Transnational Workshop

Timeline: December, February, March (week 10), April (week 15), May

D1.2.1 - Methodology Report
D1.1.3 - UAM to be tested
D1.4.2 - Deployment Action Plan
D1.4.1 - Peer Review Report
D1.1.3 - UAM validated by EAB



The screenshot shows a Zoom meeting interface. The main window displays a presentation slide with the following content:

NEXT STEPS AND FUTURE COLLABORATIONS

- Consultation and validation of 1.3 Final User acceptance model : April 2024
- Transnational Peer Review Seminar in Italy: March 2024
- Consultation and validation of D2.2.1: Open Innovation Tools: August 2024

The meeting controls at the bottom include: Mute, Stop Video, Security, Participants (23), Chat, Share Screen, Summary, AI Companion, Record, Show Captions, Reactions, Apps, Whiteboards, Notes, and More. A 'Leave' button is visible in the bottom right corner.

The participants list on the right side of the screen includes:

- SV Sarah Vidmar (Co-host, me)
- P Pomurje TechPark (Host)
- MB Mathilde Besnard (Co-host)
- U University Ljubljana (Co-host)
- A Alessandro
- AG Annalisa Giarinini imech
- BH Bastian Hothas
- BZ Borut Zrim (PTP)
- CB Confindustria Bergamo - Andrea Mazzoleni
- GP Gigi Petrali - DIH Lombardia
- HS Henryk Stawicki | Change Pilots (PL/SE)
- IK Igor Kovač
- JF Jerzy Fugas
- KM Katia Mohar Bastar



Signature List / Online attendance sheet

1	Meeting ID	Topic	Start Time	End Time	User Email	Duration (I	Participants
2	8,1E+10	GREENE 4.	#####	#####	info@p-tec	76	30
3							
4							
5		Name (Orig	User Email	Total Durat	Partner		
6	1	Pomurje T	info@p-tec	76	LP		
7	2	Igor Kovač		74	LP	EAB member	
8	3	Sarah Vidmar		70	LP		
9	4	Borut Zrim (PTP)		69	LP		
10	5	Katja Mohar Bastar		45	LP		
11	6	Muhamed Turkanović		46	LP		
12	7	Bastian Hothas		75	PP2		
13	8	schmidchristian		72	PP3		
14	9	Sarah Hedden (MIND C		71	PP3		
15	10	Mathilde Besnard		70	PP3		
16	11	Selina-Maria Schiller		70	PP3		
17	12	University Ljubljana		71	PP4		
18	13	Tanja Golja		66	PP4		
19	14	Marek Hartych		70	PP5		
20	15	Tomas Sivicek		69	PP5		
21	16	Vojtech Jira (DEX IC		70	PP6		
22	17	Gigi Petrali -DIH Lomb		71	PP7		
23	18	Annalisa Giavarini lme		69	PP7		
24	19	Alessandro		64	PP7		
25	20	Marzia Morgantini		55	PP7		
26	21	Confindustria Bergam		52	PP7		
27	22	Jerzy Fugas		73	PP8		
28	23	pawel mikolajczyk		13	PP8		
29	24	Urszula Wozniak KPT		68	PP8		
30	25	Henryk Stawicki Cha		33	PP8		
31	26	kereszturi.zsolt		37	PP9		
32	27	Albert Kondricz - IFKA		43	PP9		
33							