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Executive summary

The purpose of this document is to present the pilot methodology for creating new sustainable value chains, with B2GreenHub serving as a support ecosystem, offering tools, trainings and marketplace. This deliverable provides an overview of the tools developed in the GREENE 4.0 project during *Activity 2.4: Setting up Transnational Open Knowledge Box*. This activity is closely linked to *Activity 3.3: Deploying GREENE 4.0 Innovation Programs*, as its goal is to connect solution providers, who have matured through the innovation programs, with solution seekers identified through the Open Innovation Maps.

The first section of this document outlines the tools developed for this purpose, as this information will be crucial in the next phase, where these tools will be actively implemented. It also provides an overview of Work Package 3 (WP3), highlighting the interconnected nature of all activities within this package. A comprehensive understanding of WP3 is necessary for a holistic approach to the tasks ahead.

The document continues with a brief overview of the steps involved in the activity, followed by a more detailed explanation of each step. The entire process of piloting new value chains is supported by the B2GreenHub platform, which is reflected in the steps described.

Finally, the methodology is concluded with a timeline and task delegation. This deliverable will also serve as a baseline for WP4, as the data gathered from piloting new value chains will inform future policy development.

A. Introduction

GREENE 4.0 is a strategic initiative aimed at tackling manufacturing challenges, particularly supply chain disruptions caused by global integration. In today's interconnected business landscape, companies—ranging from large enterprises to SMEs—face an urgent need to identify and develop new, resilient value chains. These challenges also impact business support organizations and regional public authorities, making collaborative solutions essential.

To address these challenges, GREENE 4.0 is focused on generating and piloting two smart, green value chains. By working closely with business support organizations, higher education institutions (HEIs), research organizations, sectoral agencies, SMEs, and national public authorities, the project seeks to strengthen regional innovation ecosystems. The goal is to support the transition to sustainable business models within the Central European (CE) manufacturing sector.

Key Objectives

- Enhancing regional innovation capacity to facilitate the shift toward sustainability and digitalization.
- Piloting customized innovation models that create both regional and transnational value chains.
- Connecting manufacturing companies with solution providers and private equity investors to drive sustainable growth.
- Increasing knowledge and user acceptance of smart manufacturing technologies, including green industry practices and digitalization.
- Transferring tested programs and tools to Regional Innovation Strategy for Smart Specialization (RIS3) authorities to ensure long-term impact and scalability.
- Driving Sustainable Transformation

Through these initiatives, GREENE 4.0 aims to reshape the CE manufacturing sector by promoting sustainability, digital innovation, and ecosystem resilience. By fostering collaboration and knowledge-sharing, the project provides a blueprint for future-ready manufacturing that is both competitive and environmentally responsible.

GREENE 4.0 is structured through 4 WP's each with a specific objective:

WP 1 Design, test and deploy UAM aims to improve companies' capacities and willingness to adopt digital technologies and green business models by developing, testing and deploying a user acceptance tool for speeding transition to smart innovative factories and new value chains.

WP 2 Transnational GREEN 4.0 Open Knowledge HUB for Digital transformation aims to improve SME's innovation capacity and support the process of smart and green products/services development by developing and integrating open innovation models for business modelling and new innovative value chain generation in CE region.

WP 3 Greene innovation platform aims to generate, test and pilot smart and green manufacturing new value chain models in 7 pre-defined sectorial clusters by deploying three innovation programs which facilitate solutions open co-creation between manufacturing companies and solution providers.

WP 4 GREENE 4.0 Policy Learning Centre aims to improve the regional innovation ecosystem capacity to learn, transfer and replicate GREEN 4.0 innovation platform with its entire capabilities and tools by designing new policy instruments supporting sustainable manufacturing new value chains.

B. Scope of the document

The purpose of this document is to provide guidance for implementing and piloting new GREENE 4.0 value chains, which is part of work package 3, activity 3.5. Initially we summarize the tools we developed and the process of work package 3 as a base ground for further work which is the completion of activity 3.4. This guideline is structured in a way that enables each partner to plan, organize and be responsible for testing of new value chains in its own regions. This methodology provides the following:

- a summary of work completed thus far, that is relevant to this activity,
- a presentation of all the tools that have been developed and will be used,
- a step-by-step guide to piloting new value chains,
- partner responsibilities and timeline.

This document provides a comprehensive guide for the development and promotion of creating new value chains, with a particular focus on sustainable and smart value chains. We aim to:

- Provide an overview of the developed tools,
- Outline the workflow for piloting,
- Present the client journey within B2GreenHub ecosystem,
- Set the timeline for the objectives outlined in this document and set roles.

C. Piloting and testing methodology

The overarching goal of our testing phase is to generate and test new value chains for facilitating manufacturing industry transition to sustainable business models. This phase focuses on **creating robust value chains** by facilitating cooperation between **innovative technology providers and SMEs** undergoing green and digital transformation. A key enabler of this process is the **B2GreenHub platform**, which serves as the central hub for **matchmaking, collaboration, and knowledge exchange** between solution providers and SMEs. We aim to change the behaviour of manufacturing companies by matching their needs with solutions through open co-creation processes with solution providers.

This Pilot and testing methodology provides the basis for piloting our action plan across all project partners regions to ensure the achievement of both our work plan and the overall project goals. By connecting solution seekers with solution providers both identified by our open mapping initiative and utilizing the developed tools, we will step closer to achieving our primary goal: **creating new sustainable and digital supply chains.**

We need to generate and test one pilot value chain between manufacturing sectorial clusters and solutions developers from the same country and one pilot value chain between manufacturing sectorial clusters and solutions developers from all CE regions. We will achieve this by using the tools, we developed. The workflow follows a clearly structured path as presented in figure 1, starting with the screening of needs from 70 companies across seven market sectors. These needs form the basis for the Innovation Contest, where each Working Group (WG) defines concrete technology requirements per sector. Each project partner (PP) submits two targeted applications aligned with these needs, ensuring high relevance and diversity of proposed solutions. The selected technologies from the Innovation Contest serve as solution providers for the next project stages, forming the foundation for practical implementation. Central to this process is our Transnational Open Knowledge Box—a collaborative platform where insights and results are shared across partners. This knowledge base directly supports the creation of Innovation Programs, which are categorized into Proof of Concept, Minimal Viable Product, and Investment/Market Readiness stages. A key element in this approach is matchmaking, where we carefully align solution providers with relevant solution seekers. Finally, selected solutions are moved into piloting and testing of new value chains, both on a national and EU level. This stage not only validates technical feasibility but also tests user acceptance and cross-border collaboration.

Each step in this pathway builds on the previous one, ensuring a seamless transition from industry needs to tested and scalable innovations.

Objectives of the Pilot Phase

The primary objectives of the pilot activities are:

- **Validation of Developed Tools**: Ensuring that the WP1 and WP2 tools (UAM, Transnational open knowledge box) function effectively within real-world SME environments, with B2GreenHub facilitating their deployment.
- **Facilitation of Business Collaboration**: Establishing structured linkages between SMEs and solution providers through **B2GreenHub platform's matchmaking features**, fostering sustainable value chains.

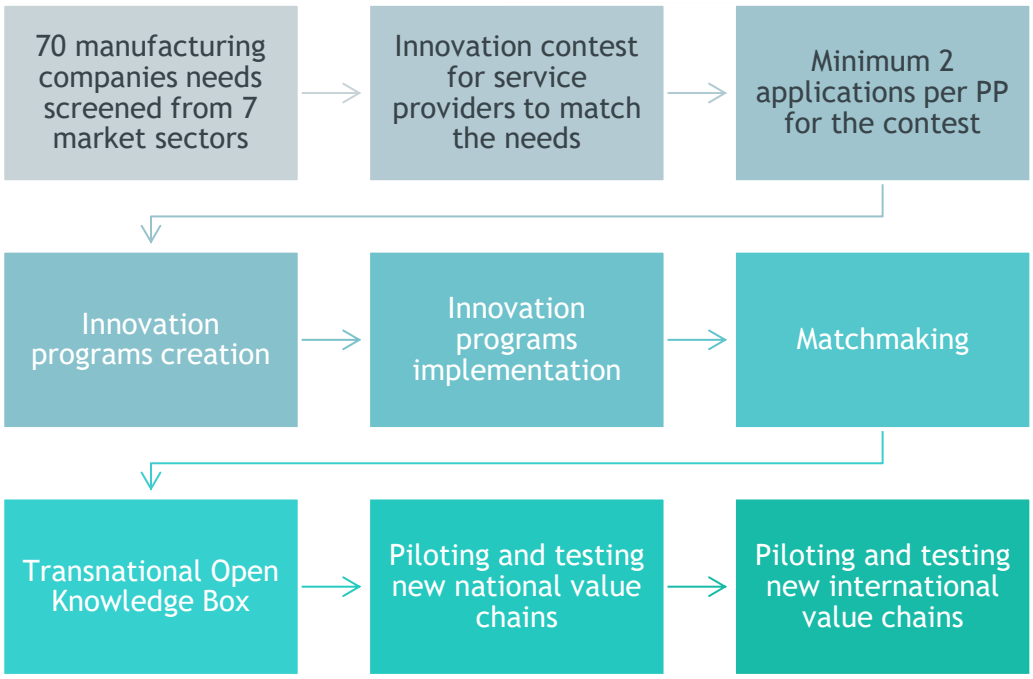

Figure 1: Activity process

Expected Outcomes

➔ **To generate, test and pilot smart and green manufacturing new value chains models in seven pre-defined sectorial clusters by deploying 3 innovation programs which facilitate solutions open co-creation between manufacturing companies and solution providers.**

The outcomes of this phase will directly inform **WP4 policy recommendations**, ensuring that the tools and methodologies developed within the project remain impactful beyond the pilot phase.

What tools are we testing within A3.4?

The following tools have been developed under previous work packages to support SMEs in their green and digital transformation:

1. User Acceptance Model (UAM) (A1.3)

The User Acceptance Model (UAM) assesses SME readiness for digital and green transformation and provides a roadmap for improvement. Developed in collaboration with SMEs, the UAM is a structured framework that combines evidence-based strategies with practical tools. It simplifies the transition to smart manufacturing by offering clear guidance to businesses that may feel overwhelmed by its complexity. The questionnaire assesses two types of initiatives, digital and green. It helps SME's define where their company stands regarding green and digital competencies which enables them to recognize areas of improvement.

2. Open Innovation Map (A2.1)

The Open Innovation Maps are designed to support SMEs in their green and digital transitions by identifying key regional innovation stakeholders. Each map collects information on the most relevant technology providers, innovation assets, green and digital experts, facilitators, and other related initiatives in each country. Developed through a 6-step process, these maps are the result of collaborative efforts from all project partners, ensuring consistency and comparability across regions. The maps highlight strengths, weaknesses, and differences between countries, providing valuable insights for future collaborations and promoting synergies within the European industrial ecosystem. Overall, the Open Innovation Maps serve as a comprehensive resource for identifying local innovation networks and supporting SMEs in accessing the knowledge and technologies they need for their transition.

3. Open Innovation Capacity building toolkit (A.2.2)

A suite of collaborative tools designed to foster co-creation and knowledge exchange between SMEs and innovation actors.

a) **The B2GreenHub - Toolbox**

The Sustainability Toolbox is an online platform designed to make sustainability strategy accessible and implementable for organizations of any size across various industries. It provides a comprehensive suite of tools, including eight step-by-step how-to guides, customizable templates, and various case studies to help organizations implement and manage their sustainability programs. These resources are structured around key sustainability activities such as starting a program, setting targets, engaging stakeholders, and reporting progress, aimed at facilitating a sustainable transition effectively. The Toolbox, provides eight structured modules to help SMEs integrate sustainability into their operations:

- Start a Sustainability Program – Establishing an agenda for sustainability.
- Create a Policy – Developing sustainability-driven policies.
- Engage Stakeholders – Involving key players in sustainability efforts.
- Identify Issues – Recognizing sustainability challenges within the business.
- Set Targets – Defining clear and measurable sustainability goals.
- Plan and Implement – Structuring and executing sustainability initiatives.
- Assess Progress – Monitoring and evaluating sustainability performance.
- Report and Communicate – Sharing progress and addressing challenges with stakeholders.

Developed in collaboration with Foxall Munro Ltd, the Toolbox is tailored to the needs of the B2GreenHub audience, ensuring improved engagement, user experience, and practical guidance.

b) Expert Forum

The Expert Forum is a dynamic platform that connects SMEs with specialists across various fields, offering expert knowledge, personalized advice, and strategic insights.

As an integral part of B2GreenHub, the forum helps businesses navigate the challenges of green and digital transformation. By engaging with industry professionals, researchers, and technology providers, SMEs can explore innovative solutions, stay informed on emerging trends, and enhance their competitive edge.

It fosters knowledge exchange, collaboration, and problem-solving, providing SMEs with the resources needed for sustainable, technology-driven growth.

c) Business Model Generator

The Business Model Generator is a tool designed to help SMEs create, analyse, and refine their business models. Utilizing methodologies such as the Business Model Canvas, Lean Canvas, and Sustainable Business Model Canvas, it provides a structured approach to:

- Defining value propositions
- Identifying customer segments
- Mapping revenue streams and cost structures

By facilitating brainstorming, collaboration, and strategic planning, the Business Model Generator empowers SMEs to innovate and optimize their business strategies effectively.

4. Private Equity Investment Readiness Tool Playbook (A2.3)

The Private Equity Investment Readiness Tool Playbook is designed to support SMEs in securing private funding for digital and green investments.

Developed under Work Package 2.3, it includes two main sections:

- How to Become Investment Ready
- Key Elements of a Successful Pitch

This playbook provides a set of online tools, instructions, and templates to help SMEs streamline business and financial planning. By guiding companies through business model development, market opportunity analysis, and financial projections, the playbook equips them with the necessary foundation to attract potential investors. A step-by-step guide outlines the investment readiness process in seven structured phases, making it easier for SMEs to navigate the funding landscape.

5. Training Programmes (A2.5)

Training Programmes provide capacity-building modules designed to equip SMEs with the skills needed for successful digital and green transformation. These modules cover key areas such as technology adoption, sustainability practices, financial planning, and strategic innovation. By offering structured learning pathways, the training programmes empower SMEs to adapt to new technologies, enhance operational efficiency, and strengthen their market positioning.

5 Modules based on the application form cover the following content:

- Module 1: Beginners Program Introduction to sustainability and green transition for SMEs with no prior knowledge.
- Module 2: Smart Manufacturing and Open Innovation Toolkit Mastering Overview of smart manufacturing technologies and innovation tools for SMEs.

- Module 3: Digital Manufacturing and Open Business Generation and Operation, Digital tools and open business models to support SME digital transformation.
- Module 4: Green Industry Innovation and Sustainable Production Technologies, Sustainable production methods and green product/process innovation.
- Module 5: Funding Gaps – Reaching Private Capital by Performing Equity Investment Readiness, understanding funding gaps and preparing SMEs to attract private capital.

6. Greene 4.0 Innovation Platform — B2GreenHub

B2GreenHub is a dynamic and scalable digital platform that supports the green and digital transformation of the European business ecosystem. It is not a static website, but an active tool that connects many services, tools, and resources developed from different EU projects. The platform helps companies, startups, and policy-level actors to access and manage these resources more easily.

B2GreenHub has two main parts: the frontend and the backend. The frontend gives users a simple and clear interface that changes depending on their role, so they can find and use tools without problems. The backend is the engine of the platform. It controls data, user access, and system integration. This allows different types of users, like solution providers, project partners, and businesses, to manage their content and data.

The platform is built for flexibility and works across regions and sectors. It supports important actors in the ecosystem, like Green Experts, Digital Experts, Business Experts, and Tech Providers. It also allows for integration with partner networks and the promotion of industrial events.

The main value of B2GreenHub is that it collects disconnected EU-funded tools and platforms into one central system. This makes project management easier, increases efficiency, and helps projects create more long-term impact.

B2GreenHub focuses on two main areas: green technologies (like carbon capture, renewable energy, sustainable materials, and waste reduction) and digital technologies (like AI, cybersecurity, robotics, 3D printing, and connectivity). These focus areas help stakeholders move faster towards sustainability and digitalization.

By combining all tools, data, and expertise in one platform, B2GreenHub helps build a stronger, greener, and more competitive EU economy.

Who are we testing the tools with?

1. Screening and Selecting Solution Seekers (A3.1)

As part of Activity 3.1, the Greene 4.0 project has successfully completed the process of identifying and selecting solution seekers— manufacturing companies from various industrial sectors with specific needs for the development of innovative solutions in the context of digital and green transformation. This activity was structured through three key deliverables (D3.1.1 – Methodology for selecting manufacturing solution seekers, D3.1.2 – Selection report, and D3.1.3 – Sectorial TORs), each contributing to the systematic evaluation and selection of candidates based on predefined criteria.

Each partner identified **20 manufacturing companies in their region in line with the prepared methodology (D3.1.1)**, evaluating them based on defined criteria, such as company size, industry sector, readiness to implement innovations, and technological needs, and finally selecting **10 manufacturing companies (D3.1.2)** appropriate to undergo piloting phase. These companies were then assigned to seven market sectors, enabling further collaboration with technology providers within WP3. Furthermore, partners developed **Sectorial TORs (D3.1.3)** - specific requirements for digital and green technological needs in each manufacturing sector.

The insights gathered from Activity 3.1 will serve as a foundation for the implementation of Activity 3.4, where the piloting and testing of new value chains will take place. By identifying the most relevant solution seekers, we have ensured that the innovation ecosystem includes actors capable of driving meaningful impact within the Greene 4.0 framework. This preparatory work will streamline the next phases, as selected participants will now be engaged in collaborative innovation processes, co-creating sustainable and digital solutions to enhance regional manufacturing resilience.

2. Innovation contest as a Solution Provider Selection Mechanism (A3.2)

The Greene Innovation Contest serves as a key mechanism for identifying solution providers who will contribute to the next phase of the Greene 4.0 project. By fostering an open competition, the contest will highlight the most promising ideas and technologies that align with the project's objectives of digital and green transformation in the manufacturing sector.

Through a structured evaluation process supported by **Greene 4.0 Innovation Contest Regulation (D3.2.1)** and **Greene 4.0 Call for Proposals Guidelines (D3.2.2)**, the contest will engage innovative SMEs, technology providers, research institutions, and private equity investors who can drive sustainability and digitalization in manufacturing. The most promising participants will be integrated into the piloting phase, ensuring that Greene 4.0 benefits from cutting-edge solutions and expertise. **D3.2.3: Innovation contest assessment report** will provide the details on the following:

- **a minimal of two applications per partner for the contest that corresponds to the need of their assigned market sector.**

Winners and top-performing participants will be invited to collaborate in piloting activities, where they will join existing innovation networks, receive tailored support to implement their solutions, and engage in knowledge exchange with other key actors through developed **D3.3.1 Greene 4.0 Innovation programmes.**

3. Deploying GREENE 4.0 innovation programs (A3.3)

The finalisation of previous activity then lead us to D3.3.1 Innovation programmes creation, which is a document detailing how the technologies mapped by the innovation contest will be upgraded using the TRL (technology readiness level) scale and how we will achieve this with defined project activities. The innovation program is divided into three sub-activities each with an assigned responsible:

- Proof of Concept programme: KPT and PTP
    - This programme focuses on progressing selected technologies from TRL 1 to TRL 3. It begins with an assessment of the current TRL of each technology to identify appropriate development actions. Using tools developed within the project, the technologies will be advanced to TRL 3, resulting in a validated proof of concept.
- Minimal viable product programme: IMCEH and FHKU
    - Building on the Proof-of-Concept phase, this programme advances technologies to TRL 6, which involves demonstrating the technology in a relevant environment. Project tools and resources will be deployed with strong facilitation support to ensure that technology providers have all necessary inputs. This phase emphasizes operational testing, primarily using demo centres.
- Investment and market readiness programme: ICUK and TGZ and MGFU.
    - Once technologies reach TRL 6, the focus shifts to achieving TRL 9—defined as a system proven in an operational environment. Testing transitions from controlled environments to integration within real business operations. Collaboration between solution providers and seekers is crucial in this phase, allowing for iterative improvements based on operational feedback.

All these activities lead us to the next activity, outlined and presented in this document. From this point onward we provide a detailed description of activity 3.4: Piloting and testing of new GREENE 4.0 value chains.

How are we piloting and testing with solution providers?

Innovation programs implementation

The GREENE 4.0 project's pilot and testing phase for service providers is specifically designed to assist SMEs, startups, and industry stakeholders in testing the designed **Innovation programs (D3.3.1)**. A central component of this phase is the B2GreenHub, which facilitates access to innovation tools, promotes collaboration, and guides participants through the innovation process specified in the Innovation Programs.

The objective is to support the development of selected technologies (winners of the **A3.2 Innovation competition**) to the Technology Readiness Level (TRL) required for market implementation. Each partner is assigned to one of the seven manufacturing sectors to collaborate with selected solution seekers. The level of support provided will depend on the initial TRL of the innovative solution; solutions at TRL 2 may engage in all three innovation programs, whereas those at TRL 6 may only require the final program to achieve market readiness. Once technology reaches the appropriate TRL, we will commence matchmaking with potential users. Initial assignments of sectors to partners include:

- KPT: At least one solution in Food
- PTP: At least one solution in Metal
- IMECH: At least one solution in Electronics
- FHKU: At least one solution in Building
- ICUK: At least one solution in Plastic
- TGZ: At least one solution in Machinery and equipment
- MFGU: At least one solution in Pharma

How are we piloting and testing with solution seekers?

It is essential to highlight the benefits of piloting and testing new value chains, especially from the perspective of solution seekers. This approach helps to reduce hesitation and builds confidence in collaborating on and investing in new technologies.

We start from the assumption that companies are aware of today's rapidly changing business environment—characterised by increasing competitiveness, environmental challenges, evolving legal frameworks, and rising consumer expectations.

Introducing new technology is always connected with certain risks. However, experienced companies understand that not acting also carries risk. Whether a company decides to innovate or maintain the status quo, each decision has consequences.

Therefore, making the opportunity costs of inaction clear is critical. By aligning innovation efforts with EU strategies and guidelines, we not only reduce uncertainty but also contribute to building a resilient, future-proof, and cooperative economy.

Creating national and international value chains with B2GreenHub client journey

In this activity, we focus on the **creation of new national and international value chains** by guiding companies through the **B2GreenHub client journey**. The main objective is to support solution seekers in identifying, testing, and implementing innovative green and digital solutions with the help of our tools, expertise, and ecosystem of service providers.

But what does "creating new value chains" really mean in our context? It means establishing **new collaborations and business relationships** between solution seekers and solution providers—relationships that are built around sustainable innovation, digital transformation, and long-term economic resilience. These new value chains are designed not only to deliver immediate benefits, but also to be **replicable, scalable, and transferable** across regions and sectors.

The companies involved in this process will **receive four key elements**:

1. A **comprehensive Digital and Green Roadmap** tailored to their needs, serving as a strategic guide for implementation (using User acceptance model).
2. Access to **testing and validation of selected tools** developed during the project.
3. A curated **portfolio of service providers** from the B2GreenHub platform, offering solutions relevant to their specific challenges.
4. Support in the **implementation of a selected innovative solution** that aligns with their sustainability and digitalization goals.

The delivery of the roadmap marks a key milestone: the transition from planning to action. While the roadmap itself is a result of deep analysis and strategic alignment, it will continue to evolve throughout the course of the project—guided by feedback, testing, and collaboration. This ensures that each solution implemented is not only effective but also contributes to building a **stronger, greener, and more digitally connected economy**.

Steps to be taken within client journey

The steps described below ensure the successful deployment and testing of innovative green and digital solutions, fostering collaboration between SMEs and solution providers. Facilitators play a key role in guiding companies through each stage.

Step 1 - Entry and registration in the B2GreenHub ecosystem

The creation of new value chains will be supported by B2GreenHub, so it is important that all **clients** (solution seekers and solution providers) are formally involved in the B2GreenHub ecosystem. Introducing stakeholders to B2GreenHub can be done in a variety of ways, using different communication channels presented on figure 2. For example, you may invite a client through events, you can use email marketing, post on social media, provide training and hold press releases.

Once a client expresses interest in joining the ecosystem, they are assigned a facilitator that will guide them in client journey process.

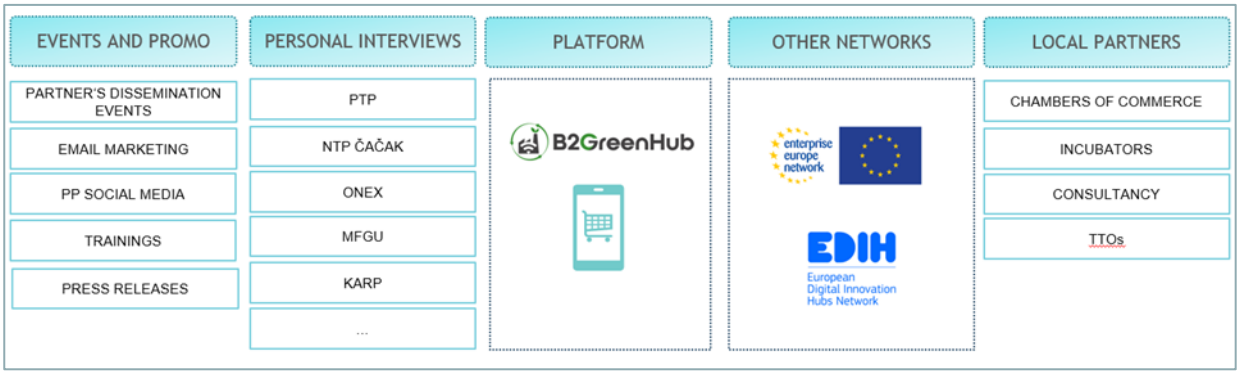

Figure 2: Step 1 - Entry in the B2GreenHub ecosystem

To complete their onboarding process, **they must be registered in the B2GreenHub system by filling out an accession form**, which will be available on the platform. Ensuring that all new users go through this registration step will help **streamline access to services** and enable better management of stakeholder participation within the ecosystem.

Figure 3: Registration to the B2GreenHub ecosystem

Step 2 - User acceptance model implementation

Once a company has entered the ecosystem and completed the accession process, the next step involves assessing its readiness and potential for digital and circular transformation. The UAM is conducted using Datamensio software (if relevant). A facilitator, key account manager, or PP staff member works closely with the company to guide them through the assessment process. The User Acceptance Model evaluates the company's current state, its needs, and its level of engagement with digital and circular economic principles and provides an in-depth evaluation to help companies understand their strengths and gaps, ensuring they receive the right support to advance their sustainability and digital capabilities. Upon completion, a detailed report is generated, **providing insights into the company's strengths and areas for improvement.**

After completing the User Acceptance Model (UAM), it's important to remember that the UAM is a tool that supplements the broader qualitative assessment. The report generated by the UAM provides valuable insights into the company's current state, strengths, gaps, and readiness for digital and circular transformation. Building on this information, the next phase involves deeper engagement with the company to define its ambitions and needs.

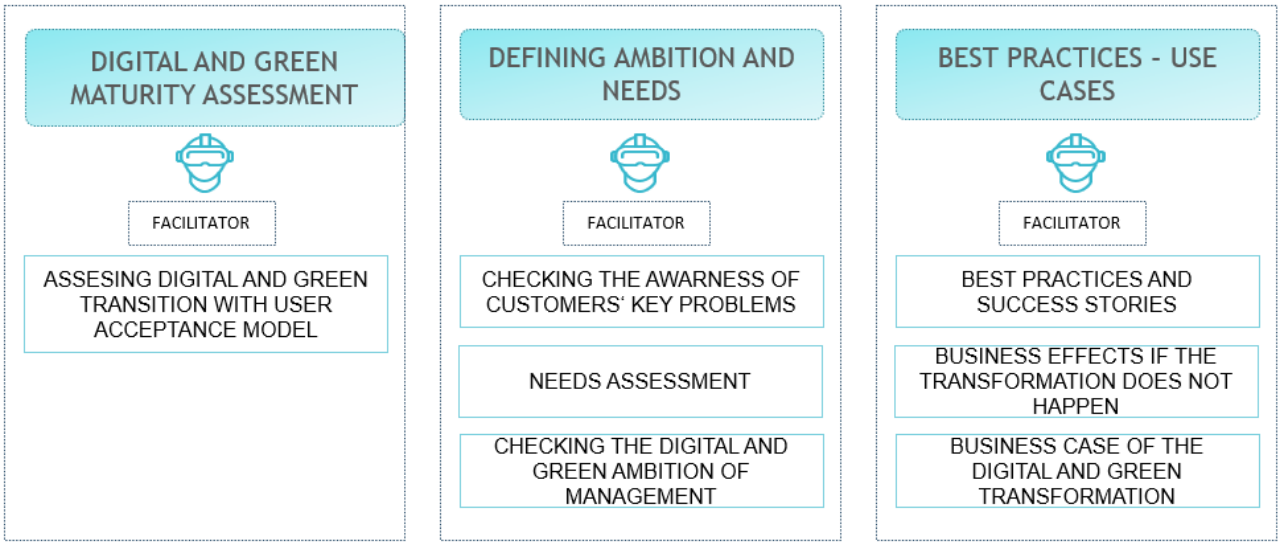

Figure 4: Step 2 - Conducting first interviews with the company

In this phase, the focus is on further understanding the company's key challenges, needs, and ambitions. Figure 4 illustrates the process of conducting initial interviews. During these interviews, assess the company's awareness of their current challenges, evaluate their digital and green ambitions, and gain insights into the level of engagement from management regarding digital and circular economic principles.

If necessary, consider involving multiple representatives from the company to ensure comprehensive information is gathered. However, it's important to assess whether this is truly required, as companies may be hesitant to dedicate excessive time to this stage. Use your judgment to determine the most efficient approach.

Additionally, to support the company's transition, introduce Best Practices and Use Cases from the B2GreenHub platform and the Open Innovation map. Share success stories of other companies that have successfully navigated digital and green transformations, offering valuable insights and inspiration for the company's journey.

It is essential to highlight the benefits of piloting and testing new value chains, especially from the perspective of solution seekers. This approach helps to reduce hesitation and builds confidence in collaborating on and investing in new technologies.

We start from the assumption that companies are aware of today's rapidly changing business environment—characterised by increasing competitiveness, environmental challenges, evolving legal frameworks, and rising consumer expectations.

Introducing new technology is always connected with certain risks. **However, experienced companies understand that not acting also carries risk.** Whether a company decides to innovate or maintain the status quo, each decision has consequences.

Therefore, making the opportunity costs of inaction clear is critical. By aligning innovation efforts with EU strategies and guidelines, we not only reduce uncertainty but also contribute to building a resilient, future-proof, and cooperative economy.

To conclude the potential business effects of not adopting these changes are analysed, helping the company understand the risks of inaction.

Step 3 - Transnational open knowledge box implementation

Following this initial assessment, the focus shifts to identifying specific areas where the company can enhance its digital transition and circularity. Based on the findings, tools developed under Work package 2 can be applied. This step ensures that companies are not only aware of their status but also equipped with the necessary tools to make meaningful progress in their circular transformation journey.

All the tools we have gathered and developed within WP2 should be actively used in this step. When meeting with an SME, ensure you are well-prepared to recommend the right tools with confidence and enthusiasm. Clearly communicate that these resources are designed to support their business and that access to expert knowledge at no cost is a rare opportunity.

Effective communication is key, so it is recommended that someone with strong communication and negotiation skills conducts the discussion. This will ensure that the value of these tools is conveyed clearly and persuasively.

Here are some examples of how to recommend the developed tools:

- **Open innovation map - Connect section**: The Connect section on B2GreenHub is dedicated to networking and collaboration, bringing together key players in the green and digital transition. This section showcases the B2GreenHub technology solution providers, providers of testing infrastructure and equipment, and digital, green, and business experts. Additionally, it also shows other partner networks and industrial events relevant to manufacturing companies seeking solutions.

  Subcategories:
  - B2GreenHub Agents – Dedicated platform representatives (project partners acting as facilitators) assisting users.
  - Digital Experts – Specialists in digital transformation technologies.
  - Green Experts – Specialists in sustainability and green technologies.
  - Business Experts – Consultants guiding companies in sustainable business strategies.
  - Tech Solution Providers – Companies offering innovative technological solutions.
  - Test Beds – Facilities where companies can test and validate new technologies.
  - Partner Networks – A directory of ecosystem partners.
  - Industrial Events – Information on key conferences, exhibitions, and networking events.

This tool can be used to present all stakeholders involved in our ecosystem to the companies. However, it's important to emphasize that facilitation remains the responsibility of the assigned facilitator. Think of this section as a catalogue, giving companies an overview of available options. But to identify the most suitable match for their specific needs, **they must consult with their facilitator**, who has the full picture and can guide them to the best choice.

- **The Toolbox -** The Toolbox is an online platform built to help organizations integrate sustainability into their business strategy with ease. It includes eight structured step-by-step modules. Highlight the **practicality and flexibility** of the Toolbox. Emphasize its usability across industries and its ability to turn sustainability from concept into action.
- **Expert Forum** – Introduce this as a space where SMEs can connect with industry professionals to gain insights and ask questions. Emphasize that it is a valuable opportunity to access expert advice and learn from the experiences of others. Encourage them to participate actively to maximize the benefits.
- **Business Model Generator** – Explain that this tool helps businesses design and refine their business model by mapping out key elements such as value propositions, customer segments, and revenue streams. Highlight its usefulness in identifying growth opportunities and ensuring business sustainability.
- **Private Equity Investment Readiness Tool** – Describe this as a tool that assesses whether a business is prepared for private equity investment. Guide the SME through how it evaluates financial health, risk factors, and investor expectations. Stress that using this tool can help them attract investment and scale effectively.
- **Open Knowledge Training Programs** – Workshops and training sessions designed to foster innovation and introduce companies to cutting-edge digital and green solutions. Present these as free educational resources designed to enhance business knowledge and skills. Explain that they cover a range of topics relevant to SMEs and provide expert-led training to support business growth and innovation. Encourage them to take advantage of these learning opportunities.
- **Matchmaking space** – This serves as a comprehensive catalogue of services available to companies looking to implement sustainable solutions. By showcasing a wide range of possibilities, it helps solution seekers expand their vision and explore new opportunities. The offerings come from a diverse network of stakeholders, including solution providers, industry experts, and testbeds, creating a dynamic and collaborative ecosystem.

Step 4 - B2Greenhub matchmaking

B2GreenHub **Matchmaking** is a key element in helping companies move from assessment to action. It is not an automated feature, but a facilitator-led process that connects companies with the right service providers and experts based on their transformation needs.

After the **User Acceptance Model (UAM)** assessment is completed, a **digital and green roadmap** is generated for the company. This roadmap includes **concrete, actionable steps** that the business should take to improve its sustainability, digital maturity, and circular practices.

The facilitator then plays a central role in translating this roadmap into real collaboration opportunities. Based on the defined actions, the facilitator identifies relevant **service providers registered in the B2GreenHub platform**, particularly those selected through the innovation contest for their quality and relevance. These providers are matched with the company's roadmap to form a **custom service offer**.

This offer is more than just a list of potential partners—it represents a **client journey**. The facilitator defines which experts, services, or tools the company should engage with, in what sequence, and for what purpose. This journey supports the company's transformation from planning to piloting, implementation, and beyond.

The matchmaking process is deeply connected with the **Greene 4.0 services**, which are organized around four main pillars, presented on figure 9:

1. **Test Beds** – Companies gain access to testing with digital equipment, feasibility studies, proof of concept or prototyping services, pilot environments, and individual consultancy. These services support experimentation and validation of new solutions.
2. **Skills** – Through the support of digital and green experts, SMEs can benefit from individual training, open innovation programs, the Virtual Academy, an interactive knowledge database, and one-on-one advisory. This ensures knowledge development aligned with transformation goals.
3. **Funding** – Business experts assist companies with advisory services, access to investors, project proposal development, strategic partnerships, and funding workshops. These activities are designed to help secure the financial resources needed to scale innovation.
4. **Networking** – Facilitators provide services such as technology scouting, trend analysis, use case sharing, and participation in public information events or B2B matchmaking (e.g., through EEN). These activities strengthen collaboration and visibility within the ecosystem.

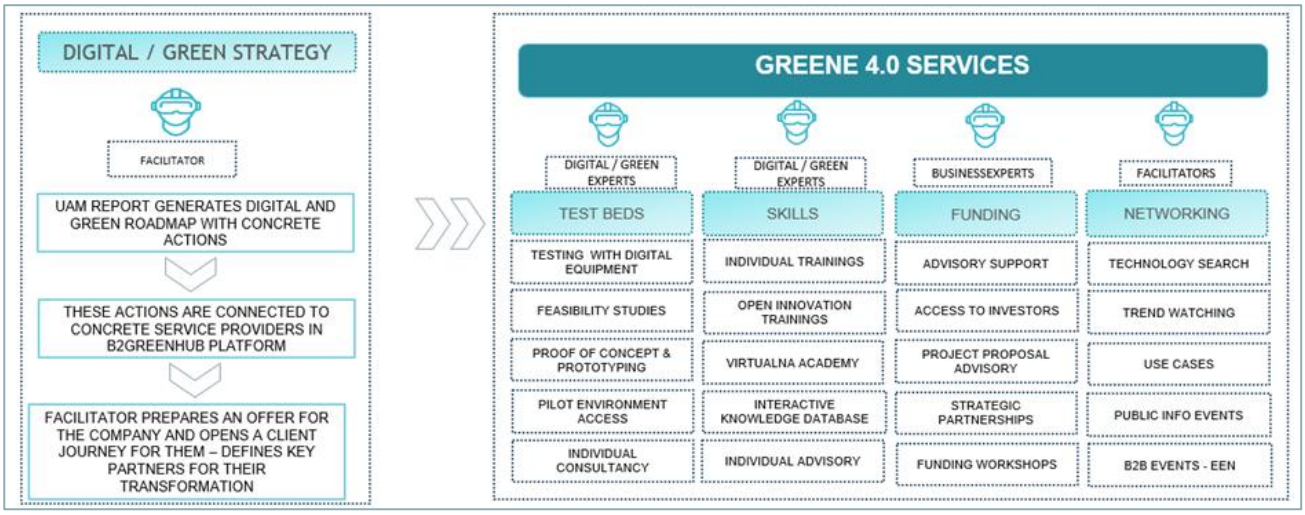

Figure 5: Matchmaking services in Greene 4.0

At every step, the facilitator acts as a **strategic advisor**, ensuring that the support offered is practical, relevant, and tailored. The goal is to make sure that every service or partnership initiated through B2GreenHub is directly connected to a clear, UAM-defined need and contributes to the company's long-term transformation journey.

This structured, action-oriented matchmaking approach ensures that the insights gained from the assessment phase are effectively translated into impactful collaborations and measurable results.

Everything in this process is interconnected—from needs assessment and report generation to matchmaking and expert engagement.

Step 5 - Testing solutions developed with Innovation programs

This step is about helping two sides work together:

- A **solution seeker** (an SME that needs support), and
- A **solution provider** (a company with an innovative solution).

The goal is to test and implement a solution in a real environment. This is beneficial for both sides: the solution seeker improves their business, and the solution provider gets to validate and promote their solution.

Each project partner must organize at least **one pilot** in their region. To do this, you will match a solution seeker (from the **Selection Report A3.1**) with a solution provider (from the **Innovation Contest A3.2**).

Start this process **on the national level**. Use the information from **Deliverable D3.3.1** to identify good matches within your country. Once this is done, move to the **EU level**, where you will work with other partners to match companies across countries.

When the right match is found, you need to help both parties agree on how they will work together. To do this, prepare a **Memorandum of Understanding (MoU)**. This is a simple agreement that explains who does what, how the testing will be done, and what the expected results are.

As a facilitator, you will:

- Help both parties understand each other's expectations,
- Make sure they agree on the goals and timeline,
- Support them during the pilot with tools and services from the **B2GreenHub platform**.

These may include access to test beds, training, expert advice, or funding opportunities—whatever is most relevant for their pilot.

Keep in mind: your role is not to control the process, but to guide it. Stay involved, be available to support both sides, and help them get the most out of this collaboration.

The result should be a working pilot that shows clear value for both the company using the solution and the one providing it. This is what we mean by creating a **new value chain**.

Communication activities to support pilot and testing phase

To support the pilot and testing phase the following communication activities will accompany this process. To ensure broad dissemination and visibility of WP3 outputs and overall project results, a series of targeted communication activities will be carried out. These include the production of four thematic podcasts covering key project milestones, an online video tutorial showcasing the functionalities of the GREEN 4.0 Innovation Platform, and several transnational workshops dedicated to sharing progress and outcomes with stakeholders. In addition, a structured social media campaign, regular website updates, and quarterly e-newsletters will support consistent outreach to the public, manufacturing companies, sectoral agencies, and local public authorities across the partnership. The table presented includes all the activities planned for WP 3 with deadlines and responsibles.

Action description	Deadline	Responsible
Podcast for Innovation contest prepared	15.04.25	IMECH
Podcast for Innovation programs prepared	15.06.25	MFGU
Podcast for new value chains piloting prepared	15.08.25	TGZ
Podcast for innovation platform deployment prepared	15.09.25	PTP
PP2 contracts specialized services for realizing an online video tutorial regarding the platform functionalities	30.09.25	TGZ
Transnational workshop for disseminating Innovation programs organized	15.06.25	FHKU
Transnational workshop for disseminating deployment of Transnational Digital Transformation site organized	30.06.25	IMECH
Transnational workshop for disseminating piloting of new value chains models organized	30.07.25	ICUK
Transnational workshop for disseminating B2GreenHub Innovation platform launch	30.09.25	KTP
Social media campaign to disseminate and promote WP3 outputs, as well as project results (1post/2weeks): 15.6. - 31.10.2025	31.10.25	TGZ

Table 1: Communication activities

D. Partner Responsibilities and Timeline

Table 2 shows the path to ensure timely completion of the activity in accordance with AF expectations. This timeline overview is only a recommendation to meet the milestones of delivering the Testing report until September 2025, however it is subject to change due to any circumstances agreed by the consortium.

Task to achieve	Deadline	Responsible partners
Video meeting for deploying Transnational Digital Transformation Sites	May 2025	PP9 (PP2, PP3, PP4, PP5, PP6, PP7, PP8, LP, ASPs)
Pilot and Testing Methodology Creation	February 2025	LP
Run the Digital Transformation Sites, Open Knowledge Toolkit, and Prototyped Selected Solutions	July – September 2025	LP, PP2, PP3, PP6, PP7, PP8, PP9
Transnational Co-Creation Workshops (3 days) - to be changed into individual meetings	September 2025	LP, PP7, PP2
Pilot and Testing Report (at least 1 per partner)	September 2025	PP7

Table 2: Timeline overview

E. Conclusion

The purpose of this document is to provide a comprehensive and practical overview for implementing and piloting new value chains within the GREENE 4.0 framework. It outlines the necessary steps, responsibilities of each project partner (PP), and the logic behind the upcoming deliverables. Specifically, it serves as a roadmap for the preparation and execution of:

- **Deliverable D3.4.2: Pilot and Testing Report**

All project partners are expected to carefully review and provide feedback on this guidance document to confirm a clear understanding of the process. This ensures alignment and coordination across all sub-activities leading up to the successful completion of D3.4.2. The feedback loop is essential to refine the process where needed, ensure feasibility at regional levels, and enhance the quality and consistency of implementation across all participating regions.

Each PP holds a crucial role in the co-creation and piloting of new value chains, and is therefore required to:

- Actively contribute to all deliverables under this work package (WP3),
- Follow the instructions and implementation phases laid out in this document,
- Respect all fixed deadlines and milestones,
- Collaborate closely with other partners to ensure the transnational impact of the initiative.

By doing so, we collectively ensure that the methodology for piloting innovation solutions—both from the perspective of solution seekers and providers—is effectively implemented and tested. This will not only contribute to the final deliverables of WP3 but will also provide valuable insights for the policy recommendations of WP4, helping to scale and replicate the GREENE 4.0 approach in diverse industrial ecosystems beyond the project lifecycle.