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1. Introduction

This Transnational strategy defines the common framework for deploying and scaling the GREENE 4.0 (B2GreenHub) innovation platform across participating regions. The strategy provides a shared direction for all partners and serves as the reference document for the preparation of Regional Action Plans (RAPs).

The primary purpose of this strategy is to enable the systematic deployment of a transnational digital platform that supports the development, testing and market uptake of smart and green products, and the creation of new cross-border value chains between manufacturing supply and demand.

The strategy establishes a clear link between European policy frameworks (European Green Deal, Digital Europe Programme, Industrial Strategy, SME Strategy and RIS3) and concrete transnational actions. It ensures coherence of partner activities, alignment of thematic priorities and consistency in expected results. Our mission is to drive sustainable growth by providing participants with the knowledge, tools and strategies needed to align with Industry 4.0 principles and environmental best practices. The platform builds on this mission, but at the same time concretizes it through its strategic pillars – education, networking, project search and building partnerships within the innovation ecosystem of Central Europe. Our vision is to support the transformation of industry in Central Europe towards sustainable and advanced value chains, while helping individuals and organizations acquire the skills needed for the future. By connecting business, education, research and decision-making, we are creating a path to a smarter, more sustainable future where learning makes a real difference.

This document does not replace regional planning documents. Instead, it defines the common strategic pillars, intervention areas and performance framework that all Regional Action Plans must follow, ensuring that local implementation contributes to measurable transnational impact.

The long-term relevance of the strategy lies in the creation of a permanent transnational cooperation model that remains functional beyond the project lifetime and supports industrial decarbonisation, digitalisation and sustainable competitiveness in Central Europe.

2. Transnational innovation ecosystem

The GREENE 4.0 / B2GreenHub platform is embedded in a transnational innovation ecosystem that connects industry, research, education, public authorities and civil society across participating regions. In the context of this strategy, the innovation ecosystem is understood as a structured, operational environment that enables the co-development, testing and scaling of green and digital manufacturing solutions across borders.

2.1. Scope and scale of the ecosystem

The B2GreenHub ecosystem is anchored by:

- A network of 106 leading EU institutions spanning universities, research centres, business support organisations and policy bodies.
- A team of 150+ business experts and 200+ technical specialists / "tech-wizards", providing advisory, technological and innovation support to SMEs and mid-caps.
- Access to 50+ testing facilities across Europe, enabling hands-on experimentation of green and digital technologies.
- Access to 200+ technological solutions, covering green tech (energy efficiency, circular economy, carbon capture) and digital solutions (IIoT, digital twin, AI, blockchain).
- Embedded in at least 7 EU-funded projects (€14.8 m combined budget) under which the ecosystem operates and evolves.

2.2. Ecosystem roles and how they work transnationally

Four core stakeholder groups (quadruple helix):

- Industry (Manufacturers, SMEs, mid-caps): Provide real market demand, pilot cases and validation environments for smart and green products.
- Research & Education: Universities, research institutes and training organisations supply knowledge, testing capacities, labs, and up-skilling services.
- Public Authorities & Policy Bodies: Create enabling regulatory and funding frameworks, ensure alignment with RIS3 strategies and cross-regional synergy.
- Society / Media / Civil-Society Organisations: Increase awareness, acceptance and diffusion of green technologies; help create demand and social legitimacy.

Transnational operationalisation

The platform enables cross-border matchmaking between providers and industrial users (e.g., service providers in one country, manufacturing SMEs in another). It supports joint piloting of green technologies in real manufacturing environments (via the 50+ test facilities) across different countries. The ecosystem aligns regional innovation capacities into larger transnational value chains: a manufacturer in Country A uses a tech solution from Country B, and testing facility in Country C. The platform acts as the digital backbone of the ecosystem: it integrates collaboration tools, knowledge exchange, partner search, readiness assessment and value-chain creation.

2.3. Why this ecosystem matters for transnational strategy

Because the ecosystem is already multi-national, the strategy leverages an existing structure rather than building from scratch. The strategy ensures that the ecosystem becomes not just a network, but a delivery mechanism for the GREENE 4.0 ambition:

- Each Regional Action Plan (RAP) will tap into this ecosystem rather than creating isolated local structures.
- Measurable impacts (adoption of green/digital tech, creation of new value chains) will be aggregated across regions through this joint ecosystem.
- The ecosystem creates economies of scale: one tech provider can serve multiple regions; one training module can be used cross-regionally.
- Transnational coherence: By aligning partners from many regions under the same ecosystem, the strategy ensures uniform thematic focus (green + digital manufacturing) and coordinated monitoring.

2.4 Link to strategy implementation

In the context of this strategy, the innovation ecosystem sets the frame for all actions. Hence:

- The transnational intervention areas will map directly to ecosystem services (matchmaking, piloting, platform provision).
- The Regional Action Plans will specify how each region connects to the ecosystem (which local test facility, which local tech provider, which local SMEs).
- A performance framework will track ecosystem-level KPIs (e.g., number of cross-border partnerships established, number of SMEs onboarded via the platform, number of shared value-chain pilots) to ensure the ecosystem is delivering across regions.

3. Methodology

This chapter outlines the transnational methodology applied to design, validate and operationalise the GREENE 4.0 / B2GreenHub strategy. The methodology combines a structured stakeholder survey with expert validation and a joint interregional workshop, ensuring that the strategy is evidence-based, participatory and directly applicable to the development of Regional Action Plans (RAPs).

The methodology focuses on three objectives:

- Identify real needs of manufacturing SMEs and ecosystem actors
- Detect barriers and enablers for green and digital transformation
- Translate stakeholder input into strategic and operational actions

To achieve this, an online survey was developed and deployed across all partner regions to gather comprehensive insights into the potential and future direction of the B2GreenHub platform. The survey serves as the central mechanism for collecting structured data that forms the foundation of the jointly developed transnational strategy. It enables all partners to identify specific user needs, understand expectations toward the platform, and engage key stakeholders in shaping cross-border collaboration. As B2GreenHub already functions as an international cooperation space—built through multiple EU projects and a community of solution providers and seekers—the survey also explores the barriers that currently hinder cross-border uptake and cooperation. Its findings guide the formulation of strategic and specific objectives, highlight existing enablers and obstacles, and inform targeted actions to strengthen transnational value-chain integration and expand the platform's reach across Europe.

3.1. Stakeholder target groups

The survey targets four groups according to the Quadruple Helix model:

- Industry: manufacturing SMEs, mid-caps, technology providers
- Research and education: universities, R&D centres, training providers
- Public authorities: ministries, regional agencies, business support organisations
- Civil society / media: clusters, associations, innovation networks

Survey responses are used as direct input for Chapters 5–9 of this strategy.

3.2. Survey structure and logic

An online survey was developed and deployed across partner regions to gather structured, comparable insights into the potential and future direction of the B2GreenHub platform. The survey collects information on stakeholder needs, barriers to transformation, expected services, sectoral priorities and willingness to

cooperate across borders. As B2GreenHub already functions as an international collaboration space—built through several EU-funded initiatives—the survey helps clarify how stakeholders intend to use the platform and what prevents wider cross-border uptake.

The survey is structured into five thematic blocks, each informing a dedicated chapter of this strategy:

Block A – Stakeholder profiling used to understand the regional and sectoral structure of respondents.

Questions:

- Organisation type
- Country / region
- Sector (e.g. automotive, machinery, construction, energy, materials)
- Role in value chain (supplier / manufacturer / technology provider / user)

→ Outputs used in: Chapter 2 (Innovation Ecosystem) and Chapter 9 (Regional Action Plans)

Block B – Platform awareness and usage assess digital maturity and existing platform usage.

Questions:

- Do you use innovation or sustainability platforms?
- Which platforms?
- Level of satisfaction with current tools?

→ Outputs used in: Chapter 5 (Platform Synergies) and Chapter 6 (Platform Features)

Block C – Needs, barriers and transformation challenges Identifies operational and structural obstacles.

Questions:

- What are your main barriers to green and digital transformation?
- What skills are missing in your organisation?
- What regulatory or financial obstacles limit progress?

→ Outputs used in: Chapter 5 (User Needs and Pain Points) and Chapter 8 (Core Barriers and Service Design) and Chapter 9 (Regional Action Plans)

Block D – Services and platform expectations defines value proposition of B2GreenHub.

Questions:

- Which services would bring most value (training, testing, matchmaking, funding access)?
- Interest in using readiness assessment tools?
- Interest in participating in cross-border pilots?

→ Outputs used in: Chapter 6 (Platform Features) and Chapter 9 (Regional Action Plans)

Block E – Transnational cooperation and value chain integration validates cross-border potential.

Questions:

- Are you willing to cooperate cross-border?
- In which areas (R&D, production, testing, market access)?
- Would you participate in transnational value chains?

→ Outputs used in: Chapter 7 (Transnational Cooperation)

3.3. Interregional workshop: validation & co-creation

Following the survey, an interregional workshop with Project Partners (PPs) and Associated Partners (ASPs) is organised. This workshop enables direct dialogue among quadruple helix actors and serves three functions:

- Validate survey findings and test assumptions
- Prioritise enablers and barriers affecting cross-border cooperation
- Co-create strategic directions for the transnational strategy

The workshop ensures that the strategy is not only evidence-based but also jointly shaped and owned by all regions participating in its deployment. It bridges quantitative insights from the survey with qualitative, experience-based knowledge from stakeholders.

3.4. Data analysis and strategy integration

Survey answers are analysed centrally and translated into:

- Strategic priorities (Chapter 9)
- Service design specifications (Chapter 8)
- Input templates for Regional Action Plans (Chapter 9)

This approach ensures traceability between stakeholder inputs, the strategic choices made in this document, and the implementation guidance for Regional Action Plans.

4. Synergies with existing platforms

The identification of synergies with existing European platforms is a key strategic element of the GREENE 4.0 / B2GreenHub deployment. To ensure relevance, complementarity and long-term scalability, this strategy incorporates a systematic approach for mapping stakeholder platform usage, understanding their expectations and identifying opportunities for technical and thematic interoperability.

4.1. Understanding the existing platform landscape

Survey Blocks B and D revealed which digital platforms stakeholders currently use for innovation, networking, sustainability monitoring or technology scouting. This insight enables the project to:

- Identify overlapping functionalities that should not be duplicated
- Detect complementary services that could be integrated into B2GreenHub
- Understand which user habits and expectations must be addressed during platform design

Survey results confirm that stakeholders already use multiple digital platforms, but with mixed intensity:

- **55.8%** of respondents use platforms **regularly or occasionally** (11 regularly; 13 occasionally).
- **30.2%** do **not** use platforms yet but are **interested** (13).
- **14.0%** do not use platforms and are **not interested** (6).

Among those using platforms, the average satisfaction level is **3.79/5** (n=24 valid answers), indicating moderate satisfaction and room for improvement through more practical, user-centred services.

Stakeholders mainly use existing platforms for:

- Finding funding opportunities (15 mentions)
- Finding project partners (14)
- Accessing training and learning materials (11)
- Marketing / visibility (11)
- Policy / regulatory information (9)
- Testing/piloting opportunities (7) and technology scouting (7)

These results show that B2GreenHub should **not duplicate basic functions** but position itself as a **practical "deployment platform"** connecting training, matchmaking, testing, technology portfolios and funding guidance in one coherent pathway.

4.2. Creating strategic synergies

Given stakeholder platform habits, B2GreenHub should prioritise synergies that:

- connect to existing funding/partner search ecosystems,
- complement training repositories with **practical applied modules**,
- connect technology portfolios with **real testing capacities**,
- ensure interoperability and referrals rather than competition.

4.3. Rationale for synergy development

Synergies enhance the reach and sustainability of the B2GreenHub platform by:

- Connecting regional ecosystems into a wider European innovation fabric
- Avoiding duplication of services and increasing user uptake
- Providing SMEs with more complete support pathways (training → testing → innovation → financing)
- Strengthening replication potential across EU regions

This approach is aligned with RIS3 principles, which emphasise international collaboration, resource pooling and cross-regional smart specialisation.

4.4. Customising platform content based on user behaviour

Because stakeholders mostly use platforms for funding and partner search, B2GreenHub should:

- foreground **funding information** and "how-to access" guidance,
- embed matchmaking flows linked to **project consortia building**,
- provide short, applied learning assets aligned with real barriers (skills gap, data maturity),
- link technology portfolios with readiness and testing routes.

4.5. Link to Regional Action Plans

Each Regional Action Plan (RAP) should identify:

- key regional platforms used by stakeholders (funding, cluster tools, innovation portals),
- where B2GreenHub can be integrated as an "implementation bridge"
- planned actions for referral, interoperability and co-promotion.

By aligning synergies at both transnational and regional levels, the platform becomes an interconnected hub that enhances cohesion across partner regions.

5. User needs and pain points

This chapter synthesises quantitative and qualitative insights from the stakeholder survey (**n=43**) and interregional workshop validation. Findings confirm strong convergence around four overarching need areas shared across quadruple helix stakeholders.

5.1. Needs of manufacturing SMEs

Manufacturing SMEs form the largest target group of the platform. Their needs typically relate to technology adoption, market access and skills.

Four dominant needs are evident:

1. **Funding guidance and access to public financing** for green/digital projects (frequent mention of high costs and funding gaps).
2. **Skills development and workforce transformation**, including practical digital and green skills and change readiness.
3. **Digital maturity and data readiness**, including integrated workflows, data-driven planning/monitoring, and **AI readiness**.
4. **Support for competitive green business models**, including circular economy and market competitiveness.

5.2. Needs of technology providers

Tech providers depend on efficient access to users, testing environments and cross-border markets. Technology providers emphasise:

- higher visibility toward SMEs across regions,
- access to cross-border pilots and demo sites,
- clearer information about SME readiness/maturity,
- support navigating regulatory differences and market entry.

5.3. Needs of research and education organisations

These actors support technology transfer, testing and skills development. Key needs include:

- access to real industry challenges and applied collaboration,
- stronger transnational research synergies,
- curriculum modernisation (e.g., sustainable construction, AI, circular materials),

- links to testing and demonstration.

5.4. Needs of public authorities and policy stakeholders

Policy bodies require evidence, monitoring tools and alignment with RIS3 priorities. Key needs include:

- evidence for RIS3/policy alignment,
- monitoring tools for green/digital progress,
- better information flows on regulations, technologies and funding,
- coordination across governance levels and regions.

5.5. Cross-cutting needs across all stakeholder groups

Across all groups, certain needs emerge transnationally. Four cross-cutting needs emerge consistently:

1. Improved access to finance and reduced administrative burden (bureaucracy frequently mentioned).
2. Skills, workforce adaptation and change management (incl. leadership capacity).
3. Digital maturity, data integration and AI readiness (fragmented tools, manual processes, ESG reporting).
4. Support for green business models, competitiveness and ecosystem navigation (complexity + limited capacity of smaller actors).

5.6. Pain points identified through survey & workshop validation

This section summarises obstacles stakeholders face when adopting green and digital solutions. Quantitatively (1–5 barrier scale), the strongest barriers are:

- High investment costs / lack of funding: 4.05/5
- Insufficient knowledge of available solutions: 3.58/5
- Lack of skilled workforce: 3.35/5
- Long search time for partners: 3.28/5
- Low digital readiness: 3.19/5

Qualitative responses reinforce these pain points with concrete examples such as:

- bureaucracy and legal complexity,
- inability to monitor processes digitally (energy, production, reporting),
- difficulties translating strategy into practice in complex ecosystems,
- need to convince SMEs to adopt better green business models,
- lack of mentoring/expert access.

5.7. Implications for platform design

This section links needs → platform functionalities. The needs and pain points imply that platform design must prioritise:

- Funding guidance (most demanded service) and navigation of support schemes,
- a clear technology portfolio to reduce "solution blindness",
- applied training and micro-learning for skills + change readiness,
- matchmaking for partners and project consortia, and
- digital maturity/readiness tools linked to adoption and testing.

6. Platform feature and value proposition

This chapter defines the core features of the GREENE 4.0 / B2GreenHub platform and articulates its value proposition for different stakeholder groups. It translates the needs and expectations identified in Chapter 6 into concrete functionalities and services.

6.1. Core functional modules

The B2GreenHub platform consists of several interconnected modules, each designed to address specific user needs. Final priorities will be adjusted based on survey results. Survey service importance (1–5) clearly prioritises the following:

- Information on funding opportunities: 4.12/5
- Access to portfolio of green and digital technologies: 3.98/5
- Matchmaking with partners and value-chain actors: 3.91/5
- Access to experts and advisory services: 3.81/5
- Readiness assessment tools: 3.63/5
- Online training (Green Path Academy): 3.33/5
- Access to testing/piloting facilities: 3.21/5

1. Green Path Academy (Training & Capacity Building)

Most requested training topics (top selections):

- Preparing and managing innovation projects (22)
- Circular economy and resource efficiency (20)
- Industry 4.0 technologies (18)
- Data and digitalisation in production (18)
- Eco-design and sustainable product development (16)
- Energy efficiency in manufacturing (15)

2. Portfolio of technologies (technology scouting)

Priority technology domains requested:

- Data analytics & Artificial Intelligence (22)
- Waste reduction & recycling technologies (19)
- Energy efficient technologies (15)
- Automation & Robotics (14)
- Digitalisation & Connectivity (14)
- Plus renewable energy and sustainable materials (10 each).

3. Testing environment map (piloting & demonstration)

Demand for testing/piloting access is moderate-to-strong:

- **53.5%** are **likely or very likely** to use cross-border testing if facilitated,
- **30.2%** are unsure,
- **16.3%** are unlikely/very unlikely. This indicates strong potential if onboarding and “low effort access” is ensured.

4. Open innovation map (matchmaking & value chain creation)

Most demanded matchmaking purposes:

- Connecting with clusters and networks (24)
- Building consortia for EU/national projects (21)
- Finding research/academic partners (18)
- Finding industrial users/piloting partners (15)
- Finding technology providers (12)

5. Ecosystem & collaboration tools

Stakeholders expect collaboration tools that reduce complexity and help smaller actors with limited capacity, including guided partner search, curated opportunities and simple workflows.

6.2. Value proposition for stakeholder groups

Main benefits expected from B2GreenHub (top choices):

- Faster access to relevant solutions and partners (23)
- New business opportunities / value chains (19)
- Easier access to cross-border cooperation (16)
- Better visibility for organisation and offers (15)
- Access to high-quality training and expertise (14)
- Better alignment with policy and funding (12)
- Reduced costs and risk of experimentation (10)

These benefits should be used as the “headline” value proposition in all partner communication.

6.3. Differentiation: what makes the platform unique?

Qualitative answers highlight that B2GreenHub’s unique value lies in:

- being practical and action-oriented (not only information),

- combining green + digital transformation in one pathway,
- enabling cross-border partner finding and project building,
- linking technology visibility to real deployment routes (experts/testing),
- supporting ecosystem actors (not only manufacturers) in convincing SMEs and building viable green business models.

6.4. Linking platform features to strategic objectives

Every platform component contributes to at least one strategic objective defined in Chapter 9:

- Capacity-building → Strategic Objective 1
- Technology adoption → Strategic Objective 2
- Value chain integration → Strategic Objective 3
- Policy alignment → Strategic Objective 4

6.5. Implications for future development

Survey results suggest future development should focus on:

- funding guidance UX and templates,
- simplified onboarding for low digital maturity users,
- multilingual and “low admin” workflows,
- curated matchmaking for project consortia and pilots.

These insights will ensure that the platform remains adaptable and responsive to the evolving needs of users across partner regions. The platform functions as a transnational digital hub supporting sustainable, smart and green innovation across partner regions. Its value proposition rests on four pillars: accessibility, interoperability, cross-border collaboration and user-centric design.

7. Validating Transnational Cooperation

This chapter summarises the willingness, capacity and motivations of stakeholders to engage in cross-border collaboration through the B2GreenHub platform. It consolidates survey insights and interregional workshop outcomes to provide evidence of cooperation potential across partner regions.

7.1. Stakeholder willingness for cross-border collaboration

Overall interest in cross-border cooperation through B2GreenHub (Q28):

- Yes, definitely: 39.5% (17/43)
- Yes, possibly: 34.9% (15/43)
- Not sure: 23.3% (10/43)
- No: 2.3% (1/43)

→ Total positive interest: 74.4%

Willingness to participate in transnational value chains (Q32):

- Yes: 41.9% (18/43)
- Maybe: 41.9% (18/43)
- No: 16.3% (7/43)

→ Yes/Maybe combined: 83.7%

7.2. Priority areas for transnational cooperation

Based on preliminary consultation and ongoing platform activities, several high-priority cooperation areas have emerged. Most selected cooperation areas (Q29):

- Joint participation in funding programmes (26)
- Joint R&D / innovation projects (20)
- Cross-border piloting and demonstration (18)

(also: mobility/exchanges 16; shared testing facilities 11)

7.3. Drivers of cross-border cooperation

Stakeholders highlight several drivers that motivate cooperation beyond regional boundaries.

Key drivers (Q30, most selected):

- Access to specialised knowledge or expertise (27)
- Learning from best practices in other regions (26)
- Stronger visibility at European level (19)
- Access to markets/customers (16) and complementary capacities (14)

These drivers demonstrate why a transnational platform like B2GreenHub adds value beyond regional initiatives.

7.4. Barriers to transnational cooperation

While overall willingness is high, barriers remain that limit cooperation across borders. These will be analysed in depth in Chapter 9 (Q31, most selected):

- Lack of time / internal resources (27)
- Lack of contacts / difficulty finding partners (23)
- Administrative/legal differences (15)
- Funding for cross-border activities (14)
- Unclear benefits / perceived risks (14)
- Language/cultural barriers (10)

7.5. Evidence from interregional workshop

The interregional workshop with the participation of all Project Partners (PPs) and Associated Partners (ASPs) served as a key validation and co-creation step for the transnational strategy. Real-time feedback was collected using Mentimeter to ensure a transparent, structured and inclusive contribution from all participating regions.

The Mentimeter results confirmed a strong alignment among partners regarding the overall direction of the strategy. Partners agreed that the identified priorities accurately reflect the challenges faced by stakeholders in their regional ecosystems. In particular, the workshop validated **access to finance**, **skills and workforce transformation**, **digital maturity and data integration**, and **the development of viable green business models** as the most critical areas requiring coordinated transnational support.

Participants consistently emphasised that the B2GreenHub platform should function primarily as a **practical enabler**. The strategy was positively assessed for providing guidance without imposing rigid obligations on regions. Partners highlighted the importance of keeping the strategy flexible, allowing Regional Action Plans

to be tailored to local capacities, maturity levels and ecosystem structures while maintaining a shared transnational logic.

The Mentimeter inputs further confirmed the relevance of the following strategic emphases:

- Reducing ecosystem complexity and supporting smaller organisations with limited internal capacity.
- Strengthening matchmaking and partner discovery as a foundation for cross-border cooperation.
- Prioritising applied training, mentoring and change-readiness support over purely theoretical approaches.
- Ensuring that Regional Action Plans remain voluntary, realistic and focused on implementation support rather than formal compliance.

Overall, the interregional workshop confirmed a high level of partner ownership of the transnational strategy. The Mentimeter-based validation strengthened confidence in the coherence of the strategic framework and provided qualitative confirmation that the proposed objectives, services and implementation logic are suitable to support regional action planning and transnational cooperation.

7.6. Implications for B2GreenHub platform development

Based on the identified cooperation potential, the platform will incorporate functionalities that:

- reduce partner search friction (profiles + curated matches),
- support project consortia building,
- provide low-effort access to pilots/testing,
- provide funding info and guidance for cross-border actions.

7.7. Link to Regional Action Plans

Regional Action Plans (RAPs) should translate positive willingness (74%) into concrete region-specific pipelines and reflect the transnational cooperation potential by:

- Identifying regional actors ready for cross-border collaboration
- Designing actions that align with shared cooperation areas
- Addressing local barriers that hinder internationalisation
- Leveraging B2GreenHub tools to expand regional value chains

This ensures that transnational cooperation is not only a strategic ambition but an actionable component of regional implementation.

8. Identifying core barriers and service design

This chapter consolidates the main barriers identified through the stakeholder survey and the interregional workshop and connects them directly to required service responses within the B2GreenHub platform. It represents the critical analytical step where evidence (needs + cooperation potential) is translated into actionable service design elements. Barrier ratings (1–5) from Q20 confirm the strongest barriers and support service design decisions.

8.1. Structural barriers to green and digital transformation

These barriers refer to systemic obstacles that hinder the ability of SMEs and other stakeholders to adopt green and digital technologies.

- High investment costs / lack of funding: 4.05/5
- Lack of skilled workforce: 3.35/5
- Fragmented regional innovation support: 3.09/5
- Limited access to advanced technologies: 3.00/5

Service implications:

- Training modules via Green Path Academy
- Funding guidance and support services
- Centralised access to technology portfolios
- Harmonisation with regional support instruments via RAPs

8.2. Operational barriers for SMEs and technology providers

Operational barriers relate to day-to-day constraints affecting technology adoption, collaboration and business growth.

- Insufficient knowledge of available solutions: 3.58/5
- Long search time for partners: 3.28/5
- Limited access to testing/piloting facilities: 2.67/5
- Difficulties entering cross-border markets: 2.95/5

Service implications:

- Expanded technology catalogue
- Partner matchmaking through Open Innovation Map

- Testing facility access via Testing Environment Map
- Cross-border visibility tools for tech providers

8.3. Cross-border barriers

These barriers restrict cooperation across regions, affecting the transnational nature of the platform.

- Administrative differences between countries: 3.05/5
- Language/cultural barriers: 2.21/5

Qualitative answers add bureaucracy and legal complexity as repeated obstacles.

Service implications:

- Multilingual platform interfaces and resources
- Cross-border matchmaking events
- Standardised partner profiles to reduce uncertainty
- Guidance for internationalisation within RAPs

8.4. Digitalisation barriers

These barriers relate specifically to the digital maturity of SMEs and their readiness to use platform tools.

- Low digital readiness in organisations: 3.19/5
- Limited experience with digital platforms: 3.07/5

Qualitative answers highlight lack of integrated workflows, manual monitoring and ESG/AI readiness gaps.

Service implications:

- Digital readiness assessments
- Simplified user journeys and onboarding
- Tutorials and micro-learning modules

8.5. Synthesis: Core barrier clusters

Based on evidence, barrier clusters are best defined as:

1. Finance & bureaucracy barriers (dominant)
2. Knowledge/skills and change readiness barriers
3. Digital maturity and data integration barriers
4. Collaboration/partner discovery barriers

8.6. Translating barriers into service requirements

Each barrier identified above is linked to one or more service components of the platform:

- Funding info + guidance (highest rated service) → mitigates finance barriers
- Tech portfolio → mitigates "lack of solution knowledge"
- Matchmaking + consortium building tools → mitigates partner search/time/resource barriers
- Training (project management, circular economy, I4.0, data) → mitigates skills/change readiness
- Readiness tools → mitigates digital maturity gaps. This ensures that the platform is designed according to actual user needs and the real conditions of Central European ecosystems.

The service requirements identified here form the basis for the design of the implementation framework described in Chapter 9.

9. Strategic and specific objectives, means of implementation, and RAP framework

This chapter consolidates the strategic and specific objectives of the B2GreenHub platform and provides the full implementation logic necessary to operationalise the transnational strategy across partner regions. It integrates the findings from needs assessment (Chapter 6), cooperation analysis (Chapter 8) and barrier analysis (Chapter 9) into a coherent, actionable framework.

9.1. Strategic objectives

The strategic objectives below reflect the platform's role in supporting green and digital transformation, fostering cross-border cooperation and strengthening innovation ecosystems across Central Europe.

Strategic Objective 1: Knowledge and competence uplift

Significantly enhance the level of practical knowledge related to green and digital transformation among manufacturing companies and other innovation ecosystem actors.

Strategic Objective 2: Fostering transnational ecosystem connectivity

Establish a robust, cross-sectoral and cross-border network that supports mutually beneficial cooperation, knowledge transfer and development of new green-digital value chains.

Strategic Objective 3: Achieving platform synergies and reach

Ensure the platform's long-term relevance and sustainability by building synergies with other European platforms and aligning with RIS3 principles.

Strategic Objective 4: Strengthening education-industry-research linkages

Support cooperation between enterprises, academic institutions and applied research bodies to foster long-term competitiveness and workforce development.

9.2. Specific objectives

The specific objectives translate the strategic priorities into actionable measures. They also align with the key barriers and enablers identified in the stakeholder analysis.

SO1: Knowledge and competence uplift - specific objectives

- Develop and adapt curricula incorporating practical green and digital manufacturing skills.
- Strengthen applied research and hands-on training through university–industry collaboration.
- Expand continuous upskilling programmes aligned with Industry 4.0 and sustainability needs.
- Promote public awareness and visibility of green-digital competencies.

SO2: Transnational ecosystem connectivity - specific objectives

- Build and strengthen cross-border research and innovation networks.
- Support transnational clusters aligned with RIS3 strategies.
- Facilitate industry participation in cross-border value-chain partnerships.
- Promote international best practice exchange and joint demonstration activities.

SO3: Platform synergies and reach - specific objectives

- Integrate B2GreenHub into academic/research workflows and partner platforms.
- Establish technical interoperability with complementary European databases.
- Support SMEs in engaging with platform-enabled networking and innovation activities.

SO4: Strengthening education-industry-research linkages - specific objectives

- Encourage collaboration with technical, economic and environmental faculties.
- Engage applied research institutions to provide testing, validation and innovation support.
- Leverage university–industry partnerships to develop specialist workforce pipelines.

9.3. Regional action plan (RAP) framework

Every partner region will prepare a Regional Action Plan that directly supports the strategic and specific objectives listed above. RAPs must follow a common structure:

- Regional Context and Ecosystem Overview – Main industrial sectors, innovation actors and regional priorities.
- Key Regional Needs and Barriers – Derived from survey and workshop analysis.
- Priority Intervention Areas – Training, technology adoption, testing, matchmaking and policy support.
- Regional Actions – Concrete actions with responsibilities, timeline and expected outcomes.
- Transnational Cooperation Measures – Actions aligned with cross-border opportunities
- Monitoring and KPI Framework – Regional indicators aligned with the transnational KPIs below.

9.4. Implementation Timeline

Indicative implementation roadmap (non-binding): This strategy proposes an indicative sequence of implementation steps to support alignment and learning across regions. The roadmap is flexible: regions may adjust timing and intensity depending on local capacity and RAP priorities.

Step 1 – Alignment and readiness (continuous): Confirm priority needs and barriers at regional level using survey evidence and stakeholder validation.\n- Identify local actors, pilots and integration opportunities with existing platforms.

Step 2 – Service uptake and experimentation (continuous): Promote and onboard users to the most demanded services (funding guidance, technology portfolio, matchmaking).\n- Encourage low-risk experimentation through mentoring, training modules and facilitated access to testing.

Step 3 – Transnational scaling and capitalisation (continuous): Support replication of successful cooperation patterns and pilots.\n- Embed effective approaches in regional ecosystems and policy frameworks through RAPs and stakeholder partnerships.

9.5. Roles and responsibilities

- **Lead Partner**: Coordinates transnational strategy implementation and ensures RAP coherence.
- **Regional Partners:** Develop and implement RAPs; mobilise SMEs and regional actors.
- **Associated Partners:** Provide policy alignment, validation and institutional anchoring.
- **Technical Partners:** Ensure platform development, maintenance and user support.

9.6. KPI Framework

The KPIs monitor progress towards strategic and specific objectives.

Baseline evidence from survey (n=43):

- Stakeholders interested in cross-border cooperation: **74.4% (Yes definitely/possibly)**
- Willing to participate in value-chain initiatives: **83.7% (Yes/Maybe)**
- Likely to use cross-border testing if facilitated: **53.5% (Likely/Very likely)**

Core transnational KPIs (to be quantified during RAP drafting):

- Number of SMEs and ecosystem actors onboarded
- Number of matchmaking connections initiated (incl. project consortia)
- Number of cross-border cooperation links established
- Number of technologies showcased and adopted (cases)
- Number of users trained (module completions)
- Number of testing/piloting engagements facilitated

Important note: "Quantitative KPI target values will be specified during RAP drafting, reflecting regional context, baseline capacity and implementation intensity."

9.7. Capitalisation Plan

The capitalisation plan ensures long-term integration of platform results:

- Embedding activities in regional innovation ecosystems and RIS3 strategies.
- Developing a governance model ensuring platform continuity beyond the project.
- Expanding partnerships with new regions, platforms and European networks.
- Documenting and sharing best practices and success stories.

9.8. Coherence with strategy logic

Chapter 9 concludes the strategy by ensuring a clear chain of logic:

- Ch. 7–8 identify needs and barriers → WHAT must be addressed.
- Ch. 6 defines platform features and services → HOW needs will be addressed.
- Ch. 9 defines objectives, KPIs and RAP actions → WHO does WHAT and WHEN.

This completes the operationalisation of the GREENE 4.0 / B2GreenHub transnational strategy.