

Lasting Model for CIA Expansion & Future Use, Legal Form or Adoption Concept



D.1.4.2 - A Report for A1.4 Solution

Final version

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Document control

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D0.2	Draft version 2	internal	Final draft ready to be sent to the consortium	MCR	All PPs	10.03.2026	Final draft with the integrated feedback from WP1 core group
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A. Executive Summary

1. Project Overview

SMART CIRCUIT's objective is to champion DIH network and actor's role to fast-track the uptake of digital/tech driven Circular Economy to enable a resource-efficient and competitive transition in CE manufacturing. Project Partners (PPs) foster 3 transnational solution systems (WP1: the Circular Innovation Academy (CIA), WP2: the Circular Industry Strategy Lab (STRATLAB), WP3: the Circular Industry Factory (FACTORY)), to bring multi-stakeholder (Enterprise/Policy/RTO/BSO, etc.) benefits and deliver a transnational approach at the intersect of digital/RIS3/circular economy strategies. PPs build capacities, reduce barriers, leverage finance and promote closing-the-loop through the identification, dissemination and implementation of key circular economy knowledge and principles within 3 key value chains (Electronics/ICT, Textile, Construction) and a combined cross-value chain (emphasizing regional specificities).

The Circular Innovation Academy (CIA) represents the transnational development of a learning curriculum and upcycling of current learning platform, creating a distinct SMART CIRCUIT learning space (AT1.2) and implementation of the learning and exchange activities in the CIRCUIT and by the CiVEs (AT1.3). This includes the completion and validation of the CIA by 24 identified CiVEs, who complete online and offline modules to get certified as CiVEs, and who test and validate the curriculum. Links to AT2.1 (Transnational Mobility Missions) and AT3.3 (Circular Industry Pilot Factory) enable the CIA to be horizontally integrated within the project. The final stage involves fostering a long-term solution for training and upskilling of professionals (across multiple stakeholder-groups) towards a common nomenclatures and framework for the delivery and support of digitally and technology driven circular economy service solutions and expanding the pool of CiVEs-in-Training taking the CIA programme (120+), including industry stakeholders, with permanent benchmarking and links established to EU/Global Initiatives (AT1.4).

The purpose of the CIA is to:

1. Train DIH staff (and adjacent BSO players/knowledge facilitators) about the value-creation opportunities of digitally driven circularity.
2. Create a common understanding between DIHs and their ecosystems about different aspects of digitally-driven circularity.
3. Provide specific, targeted advice/knowledge on the selected value chains, which are in critical need of support for circular economy to be achieved.
4. Create transnational opportunities from cross-fertilization of knowledge and experience gained from the transnational mobility missions and the implementation of the pilot.

2. Scope of Document and Summary

This document reports on the process and activities that have been conducted in order to create the CIA Solution and develop a strategy for the long-term sustainability of the WP1 results. Thus, this report provides the following insights:

- The key takeaways from the platform benchmarking activities;
- Key takeaways from the PPs' meetings, workshops, and brainstorming sessions on the CIA Solution;
- The results of the brainstorming with technical panellists on the potential CIA sustainability and new emerging fields in construction, textiles, and electronics sectors;



- The final CIA curriculum;
- The legal concept, adoption form, and the CIA long-term sustainability plan;
- The Letters of Commitment to ensure the uptake and transfer of the WP1 results.

3. Audience

This document is directed at all project partnership members, because all members of the partnership should participate in WP1 ideation and implementation, more specifically A1.4 through this report. It should be considered an internal document, and the appropriate status should be reflected in the “Dissemination Level” table.

4. Change Control Procedure and Structure

PP2/FB created this report, and it is under standard project change control, whereby PPs are requested to give feedback on the stated definition or tools in writing to the deliverable responsible (here mtSW/PP5) in a timely manner (within 8 working days according to the Rules of Procedure). As per normal procedure, at any time partners believe a project methodology should change, the request should be brought to the work package or work stream leader and Lead Partner (in this case mtSW/PP5 & KPT/LP1), 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’s “Document History” table.



B. Introduction

The goal of this document is to report on all the activities that have led to the creation of the CIA Solution and the long-term sustainability plan of the WP1 results.

1. Project Overview

SMART CIRCUIT’s objective is to champion DIH network & actor’s role to fast-track the uptake of digital/tech driven Circular Economy to enable a resource-efficient & competitive transition in CE manufacturing. Project Partners (PPs) foster 3 transnational solution systems:

- WP1: the Circular Innovation Academy (CIA);
- WP2: the Circular Industry Strategy Lab (STRATLAB);
- WP3: the Circular Industry Factory (FACTORY);

To bring multi-stakeholder (Enterprise/Policy/RTO/BSO, etc.) benefits & deliver a transnational approach at the intersect of digital/RIS3/circular economy strategies. PPs build capacities, reduce barriers, leverage finance & promote closing-the-loop through the identification, dissemination and implementation of key circular economy knowledge and principles within 3 key value chains (Electronics/ICT, Textile, Construction) and a combined cross-value chain (emphasizing regional specificities).

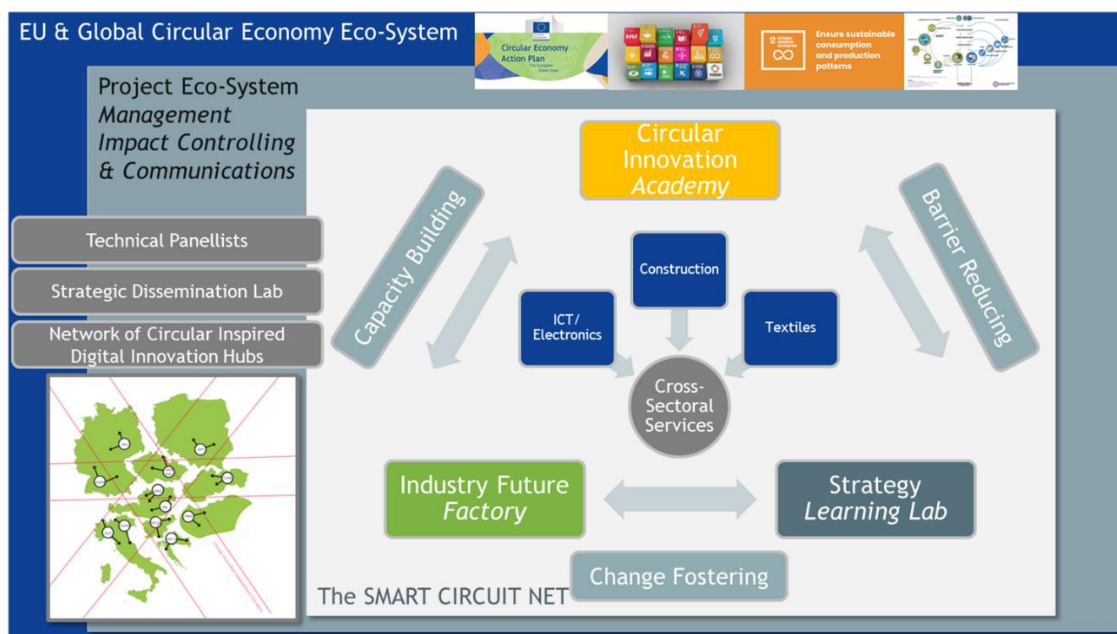


Figure 1 SMART CIRCUIT Eco-System Overview (source: Project Generated, 2023)

The project’s core hypothesis is that Digital Innovation Hubs are uniquely positioned to facilitate a more circular and regenerative future. The legal entities which make up the DIHs have knowledge, skills and access to technology (as services & products) which make them absolutely vital to bringing in a twin-transition and championing digitally-driven circularity.



2. Background of the Circular Innovation Academy

The Circular Innovation Academy (CIA) represents the transnational development of a learning curriculum & upcycling of current learning platform, creating a distinct SMART CIRCUIT learning space (AT1.2) & implementation of the learning & exchange activities in the CIRCUIT & by the CiVEs (AT1.3). A lasting model for the Circular Innovation Academy (CIA), supported by a Letter of Commitment (LoC) (AT1.4), is created as a joint future-oriented solution for ongoing upskilling & training of industry eco-system professionals. These professionals should want to become a CiVE and join a pooled collective of experts delivering value-adding service solutions to the European manufacturing eco-system. Links to EU /Global Initiatives (i.e EU Dataspace for Smart Circular Applications) are established and support formal measures to create a permanent CIA in Central Europe.

Links to AT2.1 (Transnational Mobility Missions) & AT3.3 (Circular Industry Pilot Factory) enable the CIA to be horizontally integrated within the project, and facilitate this learning-by-doing approach, as follows:

- WP1 focuses on **capacity building mechanism** through the establishment of the CIA within the CIRCUIT which enable the PPs and their stakeholders (including in particular CiVEs: DIHs staff) to gain knowledge about supporting adoption of circular policy (& regulations) & solutions to maximize shared value & translate this value to enterprises & other eco-system stakeholders. Through the CIA, PPs access knowledge about Digital-driven circular services available and focus on building the 'learning by doing' approach (A1.2) with a modular curriculum design that has online & offline portions. The overall objective is to build their own & their DIH's capabilities to deliver digital /technology-driven circular services with a transnational support-network to exchange knowledge & experience (A1.3). The CIA's results are then disseminated through the recruitment of 120+ CiVEs enabling the creation of a lasting model of cross-learning and cooperation (A1.4).
- WP2 focuses on **enhancing the exchange between DIH eco-systems** to build the trust & understanding needed to develop transnational CIDCs & bring **outside** policy/strategy learning. CiVEs are directly involved in bringing knowledge and experience within the Transnational Mobility Missions (A2.1). Through the vlog of their experience, the results outreach is increased enabling higher impact and raise awareness of the quadruple helix.
- WP3 focuses on **creating a strong industry strategy** to connect players in a transnational, aligned and thematically relevant way. CIA Activity cross-links to work in A3.3, where PPs plan into action & champion 1 transnational system of 4 jointly designed & tested pilots to promote uptake of circularity in production chains. Pilots upgrade classic DIH services (training, test-before-invest, technology feasibility) & promote transfer of knowledge & technology between territories & give technical support to specific circular value-chain value creation action.

These activities, ultimately lead to two key project results:

1. **The CIA establishment and expansion.** The Pilot (O1.2) represents the transnational development of a learning curriculum & upcycling of current learning platform (PP2/FB) w/ distinct SMART CIRCUIT learning space (AT1.2) & implementation of the learning & exchange activities in the CIRCUIT & by the CiVEs (AT1.3). This includes the completion & validation of the CIA by 24 identified CiVEs, who complete online & offline modules to get certified as CiVE. Links to AT2.1 & AT3.3, mobility & industry pilots. Delivered w/ completion of D1.3.3. The lasting model for the CIA (O1.3), in a joint future oriented solution for ongoing upskilling & training of industry eco-system professionals who'd like to be CiVEs & join a pooled collective of experts delivering value-adding service solutions to the European manufacturing eco-system. Links to EU /Global Initiatives (i.e. EU Dataspace for Smart Circular Applications) & establishes legal / formal measures to create permanent CIA in CE. Delivered with D1.4.2. (Final Solution & LoCs).



- The Circular Industry Factory (FACTORY) Solution:** Service Portfolios & Flagship Projects for Wider Spread Value-Creation using Digital/Technology-Driven Circular Economy (O3.2). A co-created transnational system to support the long-term sustainable upgrade of CE manufacturing ecosystem & spread of value-creation service solutions. 4 detailed transnational service portfolios for the chosen 4 VCs (DT3.1.2) are established & marketed + 4 joint solution flagship projects (A3.4) are submitted to deliver transnational portfolios into perpetuity. Linked to the eDIH networks, through PP & extended DIHs across macro-territories (ALP, DR, AIR, BSR). Delivered in D3.4.2 (Solution & LoC).

Figure 2 provides a visual overview of the interplay of the CIA activities, with the key Pilot established in WP1 (therefore, it provides a WP1 perspective on the CIA process flow).

PROCESS FLOW FOR CIRCULAR INNOVATION ACADEMY (CIA)

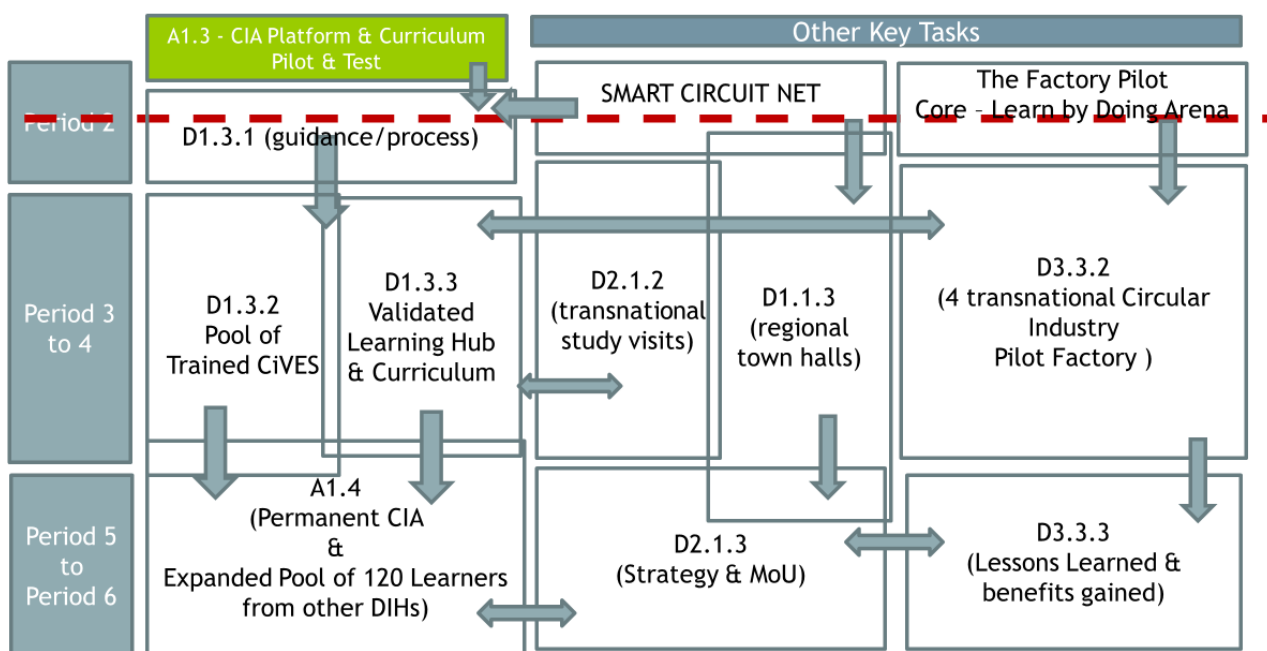


Figure 2 CIRCULAR INNOVATION ACADEMY - A WP1 Perspective on Process Flow (Source: Project Generated, 2023)



3. Contribution from Activity Description and Cross Project Knowledge

The CIA Work Package (WP) is led by PP5/mtSW. The CIA builds capacity & common language within & between the transnational DIH eco-system, and has a design/build, test/pilot, and extend/expand phase which runs within the project duration.

The principle of the CIA is that individuals in the SMART CIRCUIT NET gain knowledge about supporting adoption of circular policy (& regulations) & solutions to maximize shared value & translate this value to enterprises & other eco-system stakeholders.

In A1.4, the CIA aims to foster a long-term solution for the training and upskilling of professionals across multiple stakeholder groups, towards a common nomenclature and framework for delivering and supporting digitally and technology-driven circular economy service solutions. It also focuses on expanding the pool of CiVEs-in-Training participating in the CIA program, including industry stakeholders, with benchmarking and links established to EU/Global initiatives (Ellen MacArthur Foundation, EU Stakeholder Platform, Dataspace for Smart Circular Applications, EIT Climate). A lasting model is incorporated (DT1.4.2) with its own legal form, adopted by CIRCUIT members, and upgrades made based on trainee feedback and benchmarking. Additionally, the CiVEs pool is expanded to 120+ (with recruitment of 10 per PP) new participants registered for training. The Communication Workstream in A1.4: output factsheets with key lessons and infographics, along with a webinar featuring feedback from previous students and communications on the permanent opening of the CIA.

4. Contribution from Deliverable Description

D1.4.1 Guidance on the CIA Solution Expansion Model & Transnational Recruitment Strategy / PP5 /mtSW

One guidance on lasting circular innovation academy solution, discussion and legal processes to analyze the market need for establishment form and instructions on CiVEs recruitment expansion + webinar to market experience of pilot-trainees & ongoing curriculum benchmarking work with external TP ASPs.

D1.4.2 Lasting Model for CIA Expansion & Future Use, Legal Form or Adoption Concept / PP2/FB

One Solution for the CIA (marketing press-release for final framework) to exist for ongoing upskilling for professionals in a pan-EU context. Includes relevant curriculum and circular learning material upgrade and streamlining for wide-spread use. LoCs secured for sustainability. Delivers O1.3.

D1.4.3 Pool of Trained CiVEs Expanded, Recruitment of 120 New CiVEs-inTraining PP7 /COMET

One report on 120 (10/PP) newly recruited CiVEs-in-Training, registered and strong start to use the platform, and matrix connections to expanded CIRCUIT DIH contacts (Pan-EU focus to trainee base) + a description of the lessons and results of the CiVEs webinar.

4.1. Key definition and Concepts

SMART CIRCUIT NET: The branded name of the connected network of Digital Innovation Hubs in SMART CIRCUIT, the CIRCUIT for short. The CIRCUIT consists initially of 12 DIHS (1 associated to each PP) . The vision is to expand the CIRCUIT to minimum 28 DIHS (12PP + 16 additional, 1/PP + 5/KPT), within CENTRAL EUROPE & other macro-regional strategy areas, who commit to work on the vision & mission of the SMART CIRCUIT NET, plus engage in activities which deliver the Transnational Service Portfolios for the FACTORY (using Circular Innovation Academy Knowledge & brokerage experience from the Strategy Lab) beyond the duration of the project.

Circular Innovation Academy (CIA): The CIA builds capacity & common language within & between the transnational DIH eco-system. The principle is that individuals in the CIRCUIT gain knowledge about supporting adoption of circular policy (& regulations) & solutions to maximize shared value & translate this value to enterprises & other eco-system stakeholders.

Circular Innovation Development Corridor (CIDC): The development corridors are links between selected DIHs who commit to work together to deliver services in a transnational context associated to the topic of digitally-driven circularity.

Circular Value Translation Engineers (CIVES): Is the name of the students who are learning and exchanging in the CIA. The group starts at a size of 24 individuals, 2 representatives per Partner DIH eco-system. The group will then expand to over 120 individuals, coming from other DIHs and other BSO communities interested in learning, sharing and exchanging on this topic.

Figure 3 provides one final image showcasing the flow of activities related to the Circular Innovation Academy, and visualises the transnational and individual elements of the design, pilot and expansion phases.

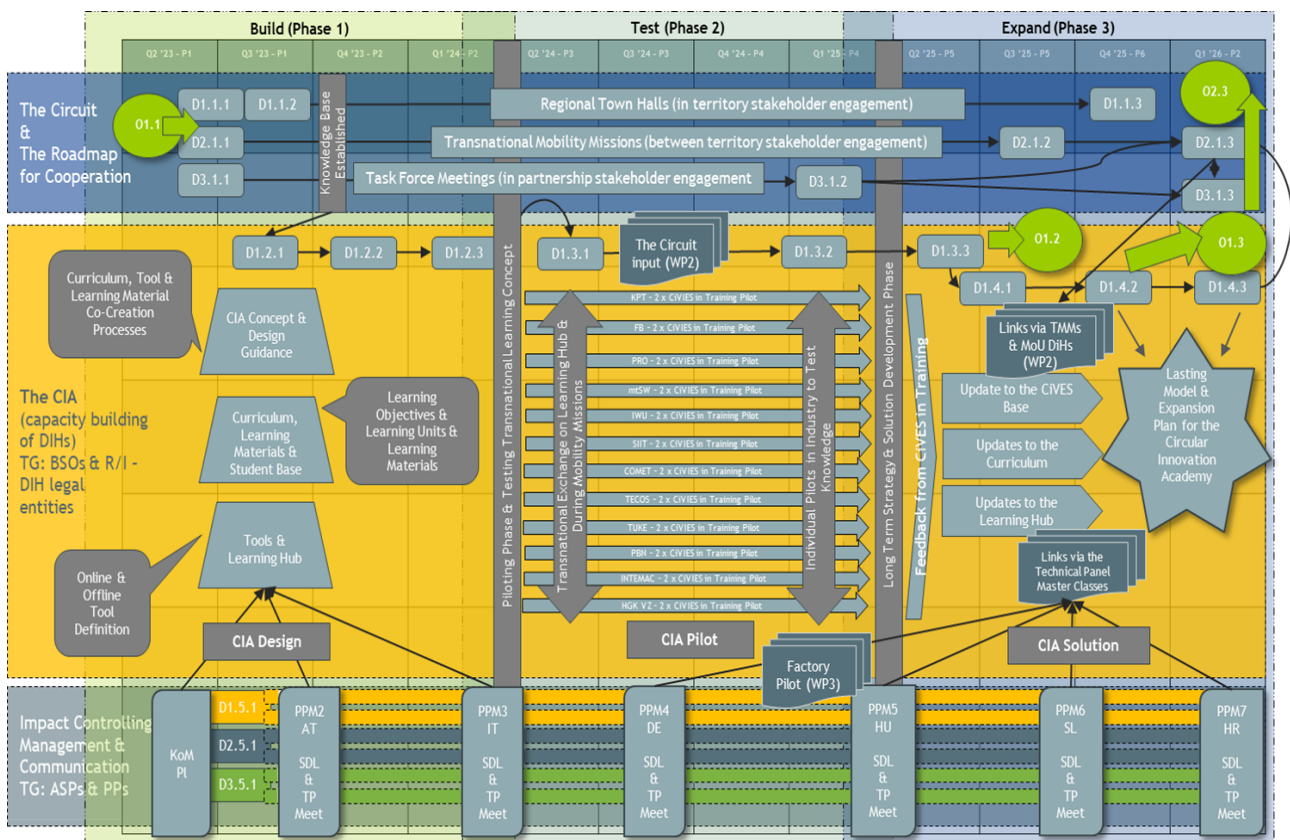


Figure 3 Plan-on-a-Page, WP1, (Source: Project Generated, 2023) (Acronyms: CIA – Circular Innovation Academy, TMM = Transnational Mobility Mission; SDL = Strategic Dissemination Lab, TP = Technical Panelists)

OBJ



C. Methodology

This section provides an overview of all the steps the consortium has undertaken, under the leadership of PP5/mtSW, WP1 leader, as well as PP2/FB, the deliverable responsible, to develop the final CIA Solution, including the final curriculum update, the platform's legal form/adoption concept, and the signing of the Letters of Commitment to ensure the anchoring of the CIA into different platforms and initiatives, and to indicate the consortium's contribution, as well as knowledge transfer and linkage with other organizations, platforms, and initiatives.

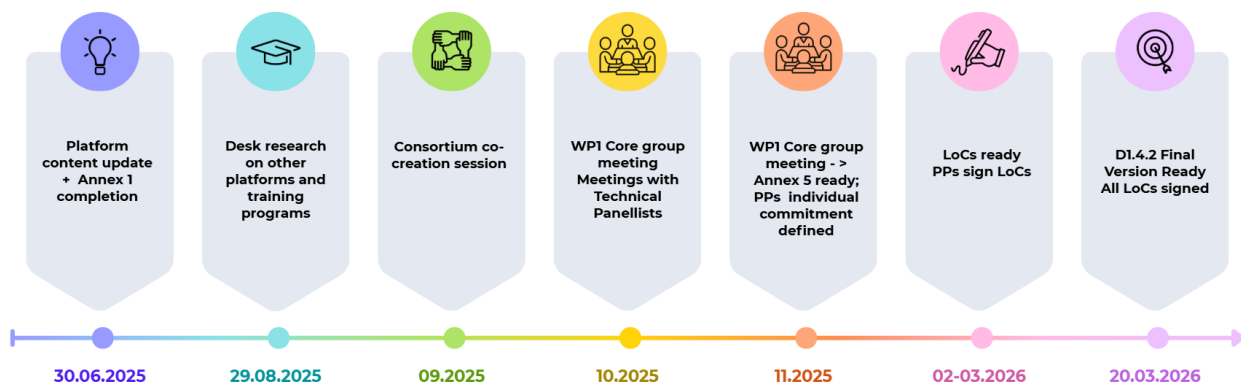


Illustration 1 D1.4.2 Delivery Process (source: Project generated, 2025)

The process was divided into five parts:

- **Part One** - Updating all the sections of the Academy to ensure alignment and a common structure, based on the testing phase, feedback from the 24 CiVEs in training, Technical Panellists reflecting on the platform's functionality by completing the CIA Validation form, and the workshop with the full consortium and 24 CiVEs reflecting on potential improvement opportunities.
- **Part Two** - Conducting background research and benchmarking with other platforms and initiatives, aiming to explore the potential anchoring of the CIA into other platforms and initiatives and to form new cooperations; learning from other platforms when it comes to long-term sustainability models (how they are financed and maintained); and comparing the content of other platforms, analysing new trends and improvement opportunities for the CIA.
- **Part Three** - Workshops with Technical Panellists to benchmark with other platforms and initiatives, stay updated on new trends and relevant topics that can potentially be integrated into the CIA if continuation opportunities and new funding emerge.
- **Part Four** - Consortium meetings and brainstorming sessions to indicate the commitment and contribution of each PP towards ensuring the long-term sustainability of the CIA. Additionally, this section reflects on the CIA core group meetings aimed at defining all the legal aspects, the adoption concept, and access and roles for the maintenance of the Academy after the project ends.
- **Part Five** - Signing of LoCs by PPs and ASPs - showcasing the process and the timeline for signing the LoCs by the consortium and the associated partners, ensuring the uptake and long-term sustainability of the WP1 results.



1. The Final CIA Curriculum Update

After receiving feedback from the CIA testing community and organizing a workshop and reflection session with the CiVEs, PP2/FB established straightforward rules and instructions for aligning and updating all Modules, ensuring consistency across topics, unifying styles and content, and adding information or improvements where needed.

Each Module owner was tasked with updating their Module according to the given instructions and completing the template to indicate the final CIA curriculum solution - [Annex 1](#).

The following changes were made:

- A short introduction was added to clarify the purpose and relevance of the links provided at the bottom of the learning materials.
- The self-assessment quizzes were reviewed and revised to ensure that correct answers were not pre-selected.
- Instructional content was streamlined and made more concise to reduce ambiguity.
- A clear explanation of the acronym CIA was incorporated to improve comprehension.
- Module descriptions were standardized to ensure uniformity and facilitate easier navigation.
- Feedback and quiz descriptions were harmonized to increase clarity and consistency across modules.
- A disclaimer was added noting that minor errors may still appear in theory learning materials.
- The self-registration process on the Moodle platform was optimized to simplify access to the course.
- A detailed email template with step-by-step registration guidance was prepared for participants.
- A designated password and search instructions were provided to help participants easily locate and enrol in the course.
- Project partners committed to further disseminating the registration information to attract additional interested participants.

2. Background Research and Platform Benchmarking

Project partners conducted background research and benchmarking with other platforms, aiming to assess current developments, new topics, and potential curriculum updates based on emerging fields in digitally driven circularity. PPs also explored the ownership models of different platforms, their funding sources, and governance structures to examine options for the long-term sustainability and adoption of the Circular Innovation Academy. Finally, PPs explored opportunities to embed the CIA into other platforms and initiatives, using this mapping as a basis.

The table below showcases the platforms and initiatives mapped by the partnership ([Annex 4](#)):



Table 1 Background Research Results (source: Project generated, 2025)

PP	Platform / Training program	Funding program	The aim of the platform	Key TG	Institutional Model	Business & Legal Structures	Technology & Deployment Forms
LP1/KPT	Green Path Academy	Greene 4.0. Interreg CE B2GreenHub initiative	B2GreenHub supports businesses in their green & digital transition through expert-led training & resources. Training modules: (1) Sustainability, digital transition, green tech basics, & human-centered change; (2) Smart manufacturing & open innovation tools; (3) Digital manufacturing & open business development; (4) Green industry innovation & sustainable production; (5) Closing funding gaps & equity investment readiness	ESG and Sustainability Managers, Managing Directors, Product Managers, and sustainability staff. Students and Early-Career Professionals Employees in Manufacturing and Technology Companies Managers and Organizational Leaders Startups and Entrepreneurs BSOs and Public Administration	Economic Development & BSO Platforms/training		Standalone Platform
LP1/KPT	https://hub4industry.pl/akademia/	EU “Digital Europe Programme (DEP / DIGITAL)” National/EU co-financing (Poland) via FENG / PARP instruments	Academy run by SMEs and industrial stakeholders in their digital transformation journey. hub4industry provides trainings supporting SMEs and industrial stakeholders in digital transformation. Linked to EDIH-DIGIMAT and leveraging DEP and national resources, it provides advice, guidance, and practical support for projects in digitization, sustainability, transformation, and innovation. Through economic development and BSO training activities, the Academy strengthens digital skills and helps companies access expertise and opportunities, operating as a public-private partnership hub for collaboration and growth. Provides trainings in Polish making the content more accessible and understandable for SMEs (mother language). Thanks to mutual	SMEs and industrial stakeholders in their digital transformation journey. Startups and scale-ups, entrepreneurs and business owners Technical and engineering staff - engineers, IT specialists, operations managers Business Support Organizations (BSOs) - incubators, accelerators, clusters and associations that help companies innovate and adopt new technologies Public sector entities & innovation stakeholders - regional development agencies, economic development units and institutions	Economic Development & BSO Platforms/training	non-profit Organization	Standalone Platform



			collaboration several CIA courses are already anchored in hub4industry academy.	engaged in digital ecosystem building. ents and lifelong learners interested in Industry 4.0			
PP2/FB	TÜV Austria Akademie		The training provides a practical introduction to Circular Economy principles, covering business models, design, policy, and systems thinking.	Executives, organizational developers, HR managers, CSR & sustainability officers, corporate waste & environmental officers, & sustainability staff.	Corporate Training Academy	For-Profit Business	Standalone Platform
	Studien- & Technologie Transfer Zentrum Weiz	Funded by Interreg	The training equips participants to develop sustainability strategies, write corporate sustainability reports (including on climate & circular economy), & take responsibility for sustainability management & implementation.		University-Affiliated Platform/Training	Cooperative Model	
	ARS Akademie		This training empowers to integrate circular strategies, improve resource efficiency, apply ecodesign, and enhance sustainability reporting.	ESG and Sustainability Managers, Managing Directors, Product Managers, and sustainability staff.	Corporate Training Academy	For-Profit Business	Standalone Platform
PP5/mtSW	Microtec Academy	Funded by the German Ministry of Research, Technology and Space	The Microtec Academy provides practical training in microelectronics and microsystems technology - from entry level to recognized bachelor's and master's degrees.	Industry & SME in Microelectronics & Microtechnology	Government-Sponsored Platforms/Training	Cooperative Model	Marketplace Model
	DIGIHUB Südbaden 2.0	Funded by the Ministry for Economy, Labour and Tourism in Baden-Württemberg	Advises, guides and supports SME in particular, but also start-ups in the region, on projects relating to digital transformation including digitization, sustainability, transformation, innovation	SME and Start-ups	Government-Sponsored Platforms/Training	Public-Private Partnership	Marketplace Model
	MDZ Smarte Kreisläufe	Funded by the German Ministry for Economic Affairs and Energy	Cross-industry support with expertise in sustainability & circular economy, led by Confederation of the German Textile & Fashion Industry	SME (and industry)	Government-Sponsored Platforms/Training	Cooperative Model	
PP7/COMET	CIRCO	Funded by the Dutch Ministry of Infrastructure & Water Management.	Enable companies & designers to create circular business models & products through practical training and design methodologies.	SMEs and entrepreneurs in traditional and manufacturing industries seeking to transition to circular models.		Non-profit Organization	



	Twin Revolution	Funded by ERASMUS + under KA2	Up- and reskill learners in the manufacturing sector, within the furniture & textile industries, by providing them with essential digital & green competences.	SMEs in the furniture and textile industries seeking to transition towards sustainable and digital operations.	Economic Development & BSO Platforms/training	Non-profit Organization	Standalone Platform
	Circulab Academy	The Circulab Academy is an independent design studio and strategy consulting agency providing online courses based on open-source circular design tools.	Circulab Academy provides a suite of courses and tools aimed at enabling professionals and organizations to implement circular economy principles effectively.	Students and educators, Business professionals and policymakers, Researchers and sustainability advocates		Non-profit Organization	Standalone Platform
PP8/TECOS	ADDCIRCLES - Moodle Online Course in Additive Manufacturing & 3D Printing	This curriculum has been developed in the ADDCIRCLES project	The free online course provides a full curriculum on 3D printing and additive manufacturing, blending research with practical materials.	Secondary school teachers, Vocational educators, Higher education lecturers, corporate trainers (SMEs, start-ups, apprenticeship programs)	University-Affiliated Platform/Training	Non-profit Organization	Standalone Platform
	CIRCI platform CIRCI - Krožna industrija	Funded by the Norwegian Financial Mechanism and Slovenia's Ministry of Cohesion and Regional Development (May 2022 - Feb 2024)	The CIRCI project promotes circular economy by reducing virgin material use, enabling secondary material circulation, and fostering industrial symbiosis. Its key outcome is a database of side-stream materials from production processes for reuse in other industries.	Industrial companies (metal, plastics, electrical industries); SMEs & large enterprises in manufacturing; R&D institutions; BSOs, Policymakers & public authorities, NGOs & the wider public	Economic Development & BSO Platforms/training	Non-profit Organization	Standalone Platform
PP9/PBN	EIT Manufacturing Academy	It's funded by the EU through the European Institute of Innovation and Technology (EIT), which operates under the Horizon Europe framework. It also runs its own funding initiatives such as the Accelerate, Innovation Funding Catalyst, & Call for Education programs, all supported by EU & co-financed public-private funds.	The objective of EIT Manufacturing is to drive innovation and skills development in the European manufacturing sector. It focuses on areas like: Digital manufacturing, Automation & robotics, Green and circular economy, Net-zero industry, Industry 4.0 technologies (AI, photonics, additive manufacturing, etc.)	Startups and scaleups (typically TRL 6+ and B2B-focused); Researchers and research institutions; SMEs and large industrial players; Students, professionals, and educators involved in manufacturing innovation and upskilling	Government-Sponsored Platforms/Training	Public-Private Partnership	Standalone Platform



	CIRCES Curriculum	The student platform (CIRCES) is federally underpinned by EU-regional funding through Interreg Europe, shaped by policy from the EU Circular Economy Package, and is also part of a broader ecosystem of EU-backed research and innovation through Horizon 2020, FP7, and Erasmus+ initiatives.	The CIRCES student platform provides an engaging, digital toolbox, interactive texts, videos, and virtual escape rooms, focused on circular economy and design, to develop sustainable thinking and concrete problem-solving skills tailored to vocational training.	Students and educators	Economic Development & BSO Platforms/training	Non-profit Organization	Standalone Platform
	EIT Manufacturing East - Marketplace	The Marketplace is part of EIT Manufacturing and is funded by the EU via the EIT's budget, contributing through the framework of EU research & innovation funding	The Marketplace aims to connect professionals and organizations across academic institutions, research centres, and industry to promote continuous learning in advanced manufacturing. It provides a catalogue of paid and free courses, targeting upskilling in digital & smart manufacturing, automation, and sustainable production	Industry professionals & executives in manufacturing; SMEs, startups, R&D institutes seeking upskilling; Academic and research staff, as well as trainers in organisations; Individuals at intermediate to advanced levels	Economic Development & BSO Platforms/training	Public-Private Partnership	Marketplace Model
PP11/INTE MAC	EDIH-DIGIMAT	DEP and national resources	Advises, guides and supports SME on projects relating to digital transformation including digitization, sustainability, transformation, innovation	SME (and industry)	Economic Development & BSO Platforms/training	Public-Private Partnership	Standalone Platform

The mapping of platforms developed through other projects, as well as those created by companies and other organizations, provided an opportunity to identify potential platforms with which the CIA can be linked, ensuring its long-term sustainability. These links and connections are presented in Section 3.

3. Consultations with Technical Panellists

Each project partner was tasked with organizing a meeting with their technical panellists to explore potential upgrades for the CIA, learn about new market trends, and identify enhancements that could be included in the CIA if a follow-up project or initiative arises.

Project partners discussed with their technical panellists interesting initiatives the CIA could be linked to for potential follow-up activities. Additionally, these meetings served as a basis for discussions on the LoCs that PPs may need to sign regarding the transfer and anchoring of project results, including the CIA, providing an opportunity to consider next steps and assess the panellists' interest in adopting or learning from parts of the Circular Innovation Academy. PPs used the [Canva Board](#) for brainstorming and the results can be found here.

The table below showcases the key inputs from the technical panellists:



Table 2 Feedback from the Technical Panellists (source: Author generated, 2026)

Are there any learning platforms or training initiatives hosted by BSOs, policy-level bodies, universities or businesses that could be linked with the CIA to build on its knowledge and ensure the Academy's long-term sustainability?	What funding sources are used to finance these learning platforms or training initiatives?	Are you involved in this initiative? Which key stakeholders should we reach out to?	Do you know of any EU, national or regional projects where CIA could be used as an output & upgraded?
<p>DIGI-ME project is dedicated to shaping a new generation of European leaders by equipping them with advanced digital skills and innovation management capabilities. It offers personalized educational and training programmes—developed in collaboration with higher education institutions, tech parks, research centres and SMEs—aimed at enabling transformative innovation across key sectors of Europe’s economy.</p>	<p>The project is co-funded by the EU through the European Health and Digital Executive Agency (HaDEA).</p>	<p>Yes, LEF is project partner.</p>	<p>EIT Manufacturing develops short, self-contained educational units (so called “nuggets”) designed for just-in-time learning and developed to be interactive, accessible on-demand and often include videos, animations, assessment similarly to the CIA</p>
<p>The Academie Burgenland and Chamber of Commerce have a lot of general courses on circular economy. Also, the University of Applied Sciences Burgenland has Sustainable Business as a study programme, and the course could be interesting to them. Also Land Burgenland has a department on energy and waste, the course could also be of great interest to them.</p>	<p>Mainly with regional tax revenues and individual EU projects that are submitted.</p>	<p>This course can be advertised through the Chamber of Commerce or local authorities. Local authorities may also be able to attract private individuals to participate in the courses.</p>	<p>In the WEEECap Project, the modules could be upgraded (Central Europe project). The course could be upgraded with the topic electric waste.</p>
<p>EIT Manufacturing Academy - The objective of EIT Manufacturing is to drive innovation and skills development in the European manufacturing sector.</p>	<p>It’s funded by the EU through the European Institute of Innovation and Technology (EIT), which operates under the Horizon Europe framework.</p>	<p>We are provided materials (2 modules) and also responsible to invite SMEs to complete the courses</p>	<p>There is a project called WE.Circular(DRP), where they developed training material on circularity for women entrepreneurs. We can promote this course within that project as well.</p>
<p>Circular by Ergodesign podcast. Ergodesign is a leading Polish industrial design studio. Circular is a new chapter in our design, taking us on a path to better products, services, experiences and a positive impact for our customers, consumers and the planet. We are currently working to embed circular solutions in everything we do. Circular by Ergodesign is a call to action.</p>	<p>The first 3 years had been funded by Ergodesign (2021-2024). Currently open to outside funding to continue creating valuable circular industrial design content.</p>	<p>This course can be advertised through KPT, chambers of commerce or local authorities in Poland.</p>	
<p>Mittelstand Digital-Zentrum Smarte Kreisläufe, CircLE Tool + https://klartext-plattform.de</p>	<p>National funding MD-Z (BMW), IGF (Circletool)</p>	<p>Yes. Stakeholders are SME, sometimes a bit bigger.</p>	
<p>LCM offers a training initiative concerning Sustainable Business covering the whole supply-chain from</p>	<p>Either payed by user, supported by funding possibilities (national & international).</p>	<p>Yes - LCM is the main organizer of the initiative</p>	<p>No specific project or topic but it can be an add-on for different EU and national projects as a first level awareness raiser</p>



Logistic to Product. The training focuses mostly on processes.			
SRIP - Krožno gospodarstvo (Circular Economy SRIP) & Circular Business Academy (Slovenia)	Slovene Smart Specialisation Strategy (SRIP framework), EU Cohesion / ERDF and national funds, participation fees for some trainings	TECOS and our network are active in Slovenian circular and manufacturing ecosystems.	
<p>Aj Ty v IT: A training initiative and learning platform focusing on entrepreneurial learning and business skills (including sustainable innovation). It can be linked with CIA as an existing knowledge and training ecosystem to integrate circular economy modules and expand outreach across entrepreneurs.</p> <p>Circular Slovakia - Platforma pre obehové hospodárstvo: A public-private circular economy platform in Slovakia fostering cooperation, tools (including a Circular Academy), networking, events and webinars involving business, government and academic partners.</p>	<p>Aj Ty v IT is a non-profit civic association focused on motivating and educating girls and women in technology. Funding: Public support via fundraising (2 % tax allocation); Corporate sponsorship & partnerships; Programme/participation income; EU Grants and project funding.</p> <p>Circular Slovakia - Platforma pre obehové hospodárstvo is a public-private platform and network Funding: Direct member contributions; Corporate sponsorship and in-kind support; Public or EU project grants/co-financing for defined initiatives; Non-profit or NGO partners providing institutional support</p>	<p>2 organizations are active in Slovakian circular ecosystems and IT.</p>	<p>CI-Hub Training Academy (Interreg Danube)</p> <p>Regional training & capacity building in circular business models and innovation for stakeholders, with hands-on modules and tools demonstrating practical circular implementation – useful for cross-border networking and learning collaborations.</p>

Additionally, Technical Panellists provided suggestions on new trends and topics in the field of circularity and technology-driven circular economy, serving as inspiration for future updates of the CIA, should the opportunity arise.

Textile Sector:

- **AI for Textile Recycling and Fiber Sorting:** AI-powered computer vision and hyperspectral imaging enable automated fiber composition detection, improving textile recycling efficiency. Emerging EU projects like [ReHubs](#) show strong results.

Potential module: Digital Twins and AI for Closed-Loop Textile Flows

- **Digital Product Passports for Textiles (DPP-TX):** EU legislation is pushing mandatory traceability of fibres, dyes, chemicals, microplastic-shedding risks and repairability. Early pilots (e.g., GS1/DPP prototypes) show feasible implementation for fashion and technical textiles.

Potential module: Implementing Digital Product Passports in Textile Value Chains

Electronic Sector:

- **Materials Traceability via Blockchain and Digital Twins:** emerging frameworks such as Catena-X are defining data models for traceable supply chains. Integrating these digital tools ensures compliance and transparency.

Potential module: Blockchain for Circular Electronics Supply Chains

Construction sector:

- **AI-based Material Recovery and Waste Valorisation:** AI-driven robotics for on-site sorting of demolition waste (e.g., concrete, glass, metal).

Potential module: AI Robotics for Construction Waste Recovery



- Cement producers are reducing their environmental impact by replacing fossil fuels in cement production with alternative fuels made from waste. Another example involves non-recyclable plastics, which helps lower CO₂ emissions and keeps waste out of landfills. The ash left after burning this waste becomes part of the cement itself. This approach reduces the use of coal and natural gas and cuts down on natural resource extraction.

Cross-sectoral:

- **Data Spaces for Circular Economy:** emerging initiatives like the Circular Data Space aim to standardize data sharing across value chains. Essential for cross-sectoral interoperability. NB: quite technical, might not be easily understood by a broad audience.

Potential module: Data Spaces and Governance for Circular Innovation

- **Skills for Circular Transition Leaders:** introduce a leadership-focused module that bridges technology, policy, and social innovation for circular transformation.

Potential module: Leading Digital Circular Transitions

- **Knowledge-as-a-Service and Simulation-as-a-Service** enable companies across the entire value chain to securely provide their specific expertise via a digital twin platform—without any confidential information being exposed. By automatically linking material data, manufacturing parameters, CO₂ balances, and functional simulations, products can be optimized in early development phases with regard to sustainability, reparability, and CO₂ footprint in line with EU ESPR requirements. This creates a collaborative yet protected data space in which suppliers, manufacturers, and customers can jointly generate better, compliant, and circular-ready products. The service thus supports key principles of the circular economy—such as reuse, repair, and recycle—by enabling better, data-driven design decisions.

- **AI-based Predictive Maintenance for Circular Lifecycles:** AI-driven predictive maintenance solutions use IoT sensors and machine learning models to continuously monitor equipment health, detect early signs of failure, and optimize component replacement cycles. From a circularity perspective, this approach extends product and equipment lifetimes, reduces unnecessary material consumption, and enables more efficient repair, remanufacturing, and spare-part recovery processes. These technologies are increasingly adopted across sectors such as machinery, electronics, and construction equipment.

Potential module: AI-Powered Predictive Maintenance for Circular Value Chains

- **AI-Driven Design for Disassembly:** AI-supported CAD plugins analyse products and automatically recommend design changes that reduce glue points, speed up disassembly, and increase standardisation of screws/modules. Used increasingly by electronics OEMs.

Potential module: AI-Assisted Eco-Design and Design for Disassembly



4. CIA Long-term sustainability, legal aspects and adoption concept

Based on the mapping of other platforms and initiatives, the PPs analysed the legal aspects and adoption concepts, as well as how other projects have developed adoption models to ensure the long-term sustainability of their platforms.

Building on this background research, the PPs held a brainstorming session during an online PP meeting in September 2025, where they explored different options to embed the CIA and secure its long-term sustainability. PPs were split into three groups and were given the task of defining the long-term sustainability pathways for the Academy from three perspectives: (1) developing a new project; (2) integrating it into university platforms/trainings; and (3) integrating it into the DIH and BSO ecosystems and platforms. A Canva board was used for this exercise, and the results can be found here.

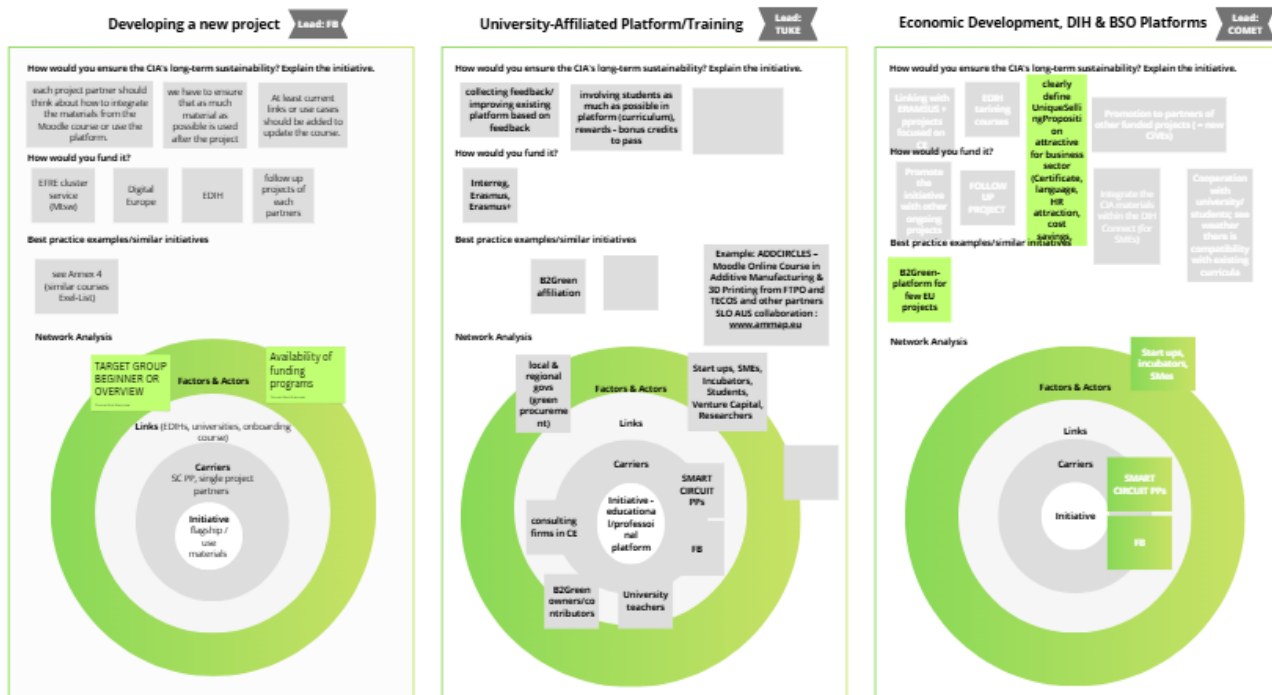


Illustration 2 CIA Long-term sustainability workshop results (source: Project generated, 2025)

Based on this input, the WP1 core group met twice (in October and November 2025) to develop a structured approach for long-term sustainability. The WP1 core group provided their proposals in the [Annex 5](#) template, outlining the legal structure and adoption concept.

The initial proposal was presented during the OPP in November 2025. Following this meeting, the PPs were given the opportunity to review [Annex 5](#) and indicate their individual commitments. These commitments were then integrated into the Letter of Commitment, which each PP will sign by the established deadline.



5. Letters of Commitment

The consortium agreed to combine the commitments for the uptake and expansion of results from all three WPs (D1.4.2, D2.4.3, and D3.4.2) into one joint Letter of Commitment (LoC) to reduce administrative burden and highlight the interlinks between activities. The LoC is structured into three parts, one per WP, with this deliverable focusing primarily on WP1.

The Consortium LoC ([Annex 2](#)) was jointly prepared by PP2/FB, PP3/PRO, and PP6/SIIT, integrating all commitments provided by the PPs. The document was ready by 1 February 2026. PPs had until 15 February 2026 to review the content and until 6 March 2026 to sign it. The signed copies were exchanged during the in-person PP meeting in Slovenia.

In parallel, each PP signed bilateral LoCs with their Associated Partners (ASPs) to ensure uptake of results beyond the consortium. A common template ([Annex 3](#)) is provided, allowing flexibility based on the ASPs' interests. The template will also be available by 1 February 2026, with a final signing deadline of 20 March 2026.

All signed LoCs will be uploaded to the designated folder to ensure proper documentation and transparency of commitments.

Letters of Commitment jointly signed with the Smart Circuit project indicate formal declaration of cooperation and mutual engagement. These LoCs present a real commitment to concrete action, demonstrating a mature, trust-based collaboration within Consortium partners, Associated partners and the EDIH ecosystem. They strengthen interlinkages between initiatives through coordinated activities such as joint knowledge exchange, promotion of complementary services for SMEs, alignment of support measures, and implementation of shared digital transformation actions. By working together, the partners also aim to create lasting synergies and a sustainable legacy that extends beyond the project lifetime.



D. CIA Solution

1. Part one - Final Curriculum

This section presents the final version of the Circular Innovation Academy, developed in collaboration with 12 project partners from 9 countries, tested with 24 professionals in training (CiVEs), and upgraded based on feedback from the testing community, including the CiVEs and Technical Panellists, to ensure the proper functioning of the Academy.

1.1. Final CIA Outlook

The final curriculum includes 8 Modules: 7 learning modules and 1 practice-oriented, learning-by-doing module, designed to bring theory closer to practice.

Overall Academy

Overview: The Circular Innovation Academy (CIA) is an advanced training program designed to equip participants with the necessary knowledge and skills to navigate the digitally driven circular economy. By integrating digital technologies such as IoT, AI, blockchain, and data analytics into circular business models, CIA empowers learners to transition from traditional linear systems to sustainable, resource-efficient practices. CIA offers a structured learning experience through seven specialized modules, each focusing on a key aspect of circularity in various industrial sectors. Participants will explore topics such as digitally driven circular economy fundamentals, circular value chains in manufacturing, the role of digital tools and IoT, circular construction, electronics, textiles, and transversal tools for circularity.

Structure and duration: The CIA provides a total of 8 modules. In total, users need 56 learning hours to complete the whole course (8 modules | 35 learning units). For each module, the consortium provided additional links, videos, and papers that participants can review to obtain deeper knowledge.

A unique feature of the Academy is its **Masterclasses module**, designed as a real deep dive into advanced topics delivered by leading technical experts from the construction, textile, and ICT/electronics sectors. These sessions go beyond standard training, offering in-depth, practice-oriented lectures based on real industrial experience and current technological challenges. Participants gain immediately applicable knowledge while also building direct connections with recognized experts. Importantly, these contacts remain accessible beyond the project lifetime, ensuring that the Academy creates not only learning opportunities but also long-term professional relationships and collaboration potential.

Evaluation: The Academy contains the Overall Course Evaluation that allows participants to evaluate the technical functionality of the platform and their overall satisfaction with it. Additionally, users can use the Forum to post open questions, exchange knowledge and experiences, and get connected. Finally, after every module, a feedback form is provided so users can leave direct and targeted feedback for each module.

Guide: The consortium also created follow-up materials that enable users to navigate the academy more easily, including the [CIA Guide and the User Policy / Data Protection Statement](#), which explain different options and opportunities and help users navigate the platform.

Certification: Users receive certification after completing each course, allowing them to focus only on the chapters they are interested in or lack knowledge in, as well as providing an opportunity for universities, schools, and other organizations to use this for the upskilling of staff, students, etc., chapter by chapter. Additionally, for users who complete the full course, an overall certificate will be issued.



Module 1 - Fundamentals of Digitally-Driven Circular Economy

Overview: Module 1 introduces the digitally-driven circular economy, focusing on how IoT, AI, blockchain, and data analytics enable circular practices. Participants explore business models, regulatory frameworks, impact measurement, and emerging trends, equipping them with practical tools to transition from linear to circular systems.

Completion: 4 learning hours

Module status: Mandatory

After completing this Module, participants will:

- Gain a foundational understanding of the circular economy and its principles.
- Recognize the role of digital enablers (IoT, AI, blockchain) in circularity.
- Understand how business models and digital platforms support circular strategies.
- Identify key regulations and standards shaping circular economy implementation.
- Learn how circularity is measured through KPIs and impact assessment.
- Develop a broad knowledge base to engage with the deeper topics covered in later modules.

Chapters Overview:

1.1 Introduction to Circular Economy

1.2 Introduction to Digital Enablers for Circular Economy IoT, AI, blockchain, and data analytics in circular systems. Digital tools such as waste tracking, digital twins, and resource optimization platforms.

1.3 Circular Economy Business Models from linear to circular models: Product-as-a-Service (PaaS), sharing economy, and circular supply chains. Role of digital platforms in extending product lifecycles.

1.4 Regulatory Landscape Overview of global, EU, and national circular economy policies. Key standards (ISO, CEN/CENELEC, Waste Framework Directive).

1.5 Measuring Circularity Circular economy KPIs (Ellen MacArthur Foundation, WBCSD, European Commission). Impact assessment tools for sustainability and business performance.

1.6 Challenges and Future Trends Barriers to circular economy adoption (technology, costs, regulations). Future trends: AI-driven analytics, decentralized circular marketplaces, and innovative materials.

Knowledge assessment: Final exam

Additional learning materials: (1) Case studies from leading circular businesses (Philips, Renault, Dell, Nestlé); (2) Reports from Ellen MacArthur Foundation, European Commission, and industry experts; and (3) Supplementary readings on business model profitability and financing mechanisms.

Module 2 - The Circular Value Chain in Manufacturing

Overview: The Circular Value Chain in Manufacturing" module explores the integration of circularity into manufacturing, emphasizing sustainable design, production, and resource recovery. Learners will examine circular design principles, their impact on production, and the practical applications of De- and Remanufacturing. Through real-world examples, the module highlights the economic, environmental, and technical dimensions of circular manufacturing. Each learning unit lasts 1.5 hours, ensuring a structured yet in-depth exploration of these core concepts.

Completion: 7,5 learning hours

Module status: Mandatory



After completing this Module, participants will:

- Apply circular value chain principles to enhance sustainability in manufacturing.
- Compare traditional manufacturing models with greener, smarter alternatives.
- Interpret the De & Remanufacturing paradigm through practical industrial examples.

Chapters Overview:

2.1 Introduction of Circular Value Chain in Manufacturing. This learning unit explores the Circular Value Chain in manufacturing, emphasizing the transition from linear to circular systems.

2.2 Circular Design in Manufacturing. This learning unit delves into the core principles of circular design, distinguishing it from traditional linear approaches. Participants will learn about skills in eco-design tools and methodologies while gaining insights into stakeholder engagement and sustainable decision-making.

2.3 The impact in Circular Production. This learning unit explores circular production, covering sustainable raw material sourcing, clean manufacturing technologies and energy efficiency, disposal waste treatment and energy conversion.

2.4 De- & Re-Manufacturing. This learning unit examines De- and Remanufacturing, highlighting their roles in sustainable production and circular economy. Learners will explore key distinctions, modern applications, and case studies, gaining insights into innovative technologies and strategies for optimizing resource use in circular manufacturing.

2.5 Industrial Use cases. This learning unit examines best practices and real-world applications of circular principles in manufacturing, highlighting how companies adopt circular economy strategies. Learners will explore repair-focused business models, innovative recycling methods, and advanced technologies that drive resource-efficient production, among the others.

Knowledge assessment: Completion of the training is validated through a **Final Exam for Module 2**, which consists of **18 multiple-choice questions**.

Additional materials: L.U. 2.1 features recommended papers from the Ellen MacArthur Foundation along with key research studies that help learners establish a foundational understanding of the circular economy. These papers offer valuable insights into its practical implementation, covering customer engagement, industry-specific challenges, green innovations, economic impact assessment, and the transformation of business value chains for enhanced sustainability and resource efficiency. L.U. 2.4 includes supplementary readings that provide learners with deeper insights into key aspects of circular economy implementation. These resources cover consumer behavior in environmental impact assessment, challenges and innovations in remanufacturing and recycling, critical factors influencing circular production, packaging reuse strategies, product lifetime extension and EU policy frameworks supporting circularity. L.U.2.5 redirects learners to the SMART CIRCUIT Brochure, which showcases 120+ success stories collected by SMART CIRCUIT partners at the Interreg Central Europe level.

Module 3 - Digital Tools, IoT & Technologies for Circularity

Overview: This module explores the role of digitalization and smart technologies in driving sustainability and efficiency in modern manufacturing. Participants will gain insights into key Industry 4.0 concepts, including IoT, Big Data, Digital Twins, Extended Reality (XR), AI, and Human-Machine Interaction (HMI). Each unit combines theoretical knowledge with real-world applications, preparing learners to integrate these technologies into their industrial environments.

Completion: 7 learning hours

Module status: Mandatory

After completing this Module, participants will:



- Understand how digital tools and IoT enhance circularity in manufacturing.
- Learn about Big Data collection, security, and AI integration for smart decisionmaking.
- Explore the validation and implementation of Digital Twins in green production.
- Discover the potential of Augmented and Mixed Reality (AR/MR) in manufacturing.
- Gain knowledge on AI-driven optimization in energy efficiency and recycling.
- Learn how collaborative robots (cobots) improve efficiency and flexibility in industrial processes.

Chapters Overview:

3.1 Introduction to Digital Tools & IoT for Circularity - Focus on additive manufacturing, IoT applications, and sustainability in production.

3.2 Sensor & Data Collection - Covers Big Data, connectivity, AI-driven analytics, and security challenges.

3.3 Digital Twin - Examines real-world use cases of digital twin validation in sustainable manufacturing.

3.4 Extended Reality (XR) in Manufacturing - Explores the benefits of AR/MR in training, production, and maintenance.

3.5 AI & Machine Learning in Industry - Looks at AI applications for energy optimization and predictive maintenance.

3.6 Human-Machine Interaction & Collaborative Robots (Cobots) - Discusses cobot integration for safer and more flexible manufacturing.

Knowledge assessment: To ensure thorough understanding and effective knowledge acquisition, each learning unit concludes with a brief review questionnaire (5 multiple-choice questions) , followed by a Final Exam at the end of Module 3, which consists of 15 multiple-choice questions. Participants must achieve a perfect score of 10.00 out of 10.00 to pass, thereby demonstrating full comprehension of the module's content.

Additional materials: Units 1 offers optional in-depth study materials on 3D printing extending learning beyond the core module. Units 3-6 include detailed use cases to provide practical insights and real-world applications.

Module 4 - Focus on Construction

Overview: This module explores the key role of construction equipment in promoting sustainable practices. The construction sector is the most resource-intensive sector in Europe. While this unit addresses good practices for handling hazardous materials, it also emphasizes not only proper waste management but also the development of buildings and infrastructure that integrate sustainable materials. This presents a challenge for construction equipment, but it also offers an opportunity to optimize material use, redesign resources, and reduce waste production.

Completion: 4,5 hours

Module status: Optional

After completing this Module, participants will:

- Understand the role of construction equipment in sustainable building practices.
- Learn about sustainable materials and key technologies and their role Gain knowledge of the legal and regulatory framework, as well as standards and certification in construction.
- Identify best practices in construction.



Chapters Overview:

4.1 Introduction to digital circular economy in the construction sector - This unit provides an overview of the digital circular economy and its relevance to the construction industry.

4.2 Sustainable materials and Key technologies - The unit focuses on innovative materials and technologies, primarily highlighting Building Information Modeling (BIM) as a key technology for the industry. It also explores the use of advanced solutions such as drones, Virtual Reality (VR), digital twins, and other emerging technologies in construction.

4.3 Impact of Circular Economy in Construction - The unit shows the role and process of EPDs and LCA in construction.

4.4 Legal and regulatory framework, standards & certification - Participants will gain insight into the legal requirements, industry standards, and certification processes that support sustainability in construction.

4.5 Central Europe Success Stories focused on Construction - This unit showcases real-world examples of successful circular economy initiatives in construction across Central Europe.

4.6 Masterclasses - Led by industry experts, these masterclasses provide in-depth knowledge on specialized topics related to Constructions.

Knowledge assessment: To ensure thorough understanding and effective knowledge acquisition, completion of the training is validated through a **Final Exam for Module 4**, which consists of **18 multiple-choice questions**. Participants must achieve a perfect score of 10.00 out of 10.00 to pass, thereby demonstrating full comprehension of the module's content.

Additional materials: The supplementary reading focuses on expanding the content of Unit 4, with a detailed discussion on the Life Cycle Assessment (LCA) process, challenges in remanufacturing systems, and an understanding of EU policies.

Module 5 - Focus on Electronics

Overview: The electronics industry stands as a significant contributor to global waste and environmental impact. Despite advancements in recycling, a circular economy approach in electronics demands more than just efficient waste management. It necessitates a fundamental shift in product design, material use, and end-of-life strategies. This module, composed of 5 learning units, aims to provide students with a holistic understanding of how to transition the electronics sector towards a circular economy, covering sustainable design, lifespan extension, circular supply chains, e-waste management, and policy advocacy.

Completion: 5 learning hours

Module status: Optional

After completing this Module, participants will:

- Understand the circular challenges in electronics, including global supply chain complexities and how circular business models promote sustainability and transparency.
- Explore the environmental and economic benefits of lifespan extension strategies in electronics, such as refurbishment, remanufacturing, and consumer engagement initiatives.
- Identify key principles of sustainable design in the electronics industry, including factors such as durability, repairability, and recyclability.
- Get knowledge related to e-waste management, including understanding advanced recycling technologies, implementing proper data security measures, and addressing challenges in collection and disposal.



- Gain insight into the role of policy advocacy in advancing a circular economy within the electronics sector, including the importance of government regulations, extended producer responsibility (EPR), and sustainable procurement practices.

Chapters Overview:

5.1 Circular Challenges in Electronics including E-Waste: explores circular challenges in electronics, including sustainability risks, e-waste management, material scarcity, complex supply chains, and evolving market demands.

5.2 Circular Solutions in the Electronics industry: are built upon Circular Business Models throughout their entire product lifecycle, which incorporate eco-friendly design, digital technologies, e-waste management strategies, recycling technologies, and consumer involvement.

5.3 Digital Use-Cases in Electronics: Key technologies are reshaping electronics, driving new digital use cases like IoT for maintenance, AI/ML for quality control, Digital Twins, Blockchain, Edge Computing, Cybersecurity, Big Data, Cloud Computing, and Digital Transformation in manufacturing.

Knowledge assessment: To ensure thorough understanding and effective knowledge acquisition, completion of the training is validated through a Final Exam for Module 5, which consists of 18 multiple-choice questions.

Additional materials: The supplementary reading focuses on deepening the understanding of Unit 5 looking at insights especially for Module 5.1 and Module 5.2 as well as the success stories collected by the consortium on ICT/electronics.

Module 6 - Focus on Textiles

Overview: The Module explores how the textiles industry - it includes not only apparel and clothing or home furnishing textiles, but also manufacturers of industrial textiles - can transition to a circular economy. As a major contributor to global waste and environmental impact, it needs more than just improved recycling. Achieving a circular economy requires a fundamental shift in product design, material use, and end-of-life strategies. This module aims to provide learners with a comprehensive understanding of how to guide the textiles sector towards circularity.

Completion: 4 learning hours

Module status: Optional

After completing this Module, participants will be able to answer the following questions:

- How can the life cycle of textile products be increased through longer service life, the use of more sustainable materials and/or changes in process management?
- What happens after using a textile? How do collection and recycling streams work in the EU but also worldwide?
- How can the potential and availability of secondary raw materials be maximized?
- How can textile waste be collected across the board?
- What new technologies and digital tools are helping to implement the circular economy in the textile sector?

Chapters Overview:

6.1 Circular Economy and the transformation in Textiles Economy: This learning unit will help you to define the textile industry in its entirety and to understand the challenges and opportunities in this industry concerning circularity.



6.2 Circular Solutions in Textiles (inkl. Masterclass): This learning unit will help you to understand how circularity can be implemented in the textile industry and how to establish the means to embrace Circular Economy.

6.3 Digital Use-Cases in Textiles : This learning unit will discover technologies and smart solutions that can help to achieve the goals of a circular economy and present new applications and business models

Knowledge assessment: Unit 4 - Tools to work on your own circularity

Additional materials: /

Module 7 - Transversal Tools for Digitally-Driven Circularity

Overview: This module provides a comprehensive exploration of the strategies, business models, data management tools, and organizational learning techniques necessary for fostering a circular economy enhanced by digital technologies. In the first part, it discusses how to create strategies for sustainability and manage their impact, including how to handle risks and communicate effectively about sustainability efforts. The second part looks at business models that help create a circular economy, such as designing products that can be reused and sharing resources. The third part covers the tools needed to manage data for sustainability, including systems that help businesses report on their sustainability and tools to track their progress. Lastly, the module talks about ways to teach and encourage employees about sustainability, using training programs and even games, and it looks at how to work together across different areas of a business to support sustainability. In short, this module teaches how to use digital tools and teamwork to make businesses more sustainable and waste less.

Completion: 7 hours

Module status: Mandatory

After completing this Module, participants will:

- **Develop Sustainability Strategies:** Understand how to create and manage sustainability strategies, including integrating sustainability into risk management and aligning company culture with circular economy goals.
- **Apply Digital Business Models:** Be familiar with business models that support a circular economy, such as designing products for reuse and sharing economy models, and be able to apply these in practice.
- **Manage Data for Sustainability:** Learn to use data management tools to track and report on sustainability goals and prepare for compliance with policies like the EU Taxonomy and the Non-Financial Reporting Directive.

Chapters Overview:

7.1 Strategy Development and Impact Management

7.2 Risk Management with a Sustainability Focus

7.3 Digitally Driven Circular Economy Business Models (Loop Modeling)

7.4 Circular Design Thinking

7.5 EU Taxonomy & Non-Financial Reporting Directive Readiness

Knowledge assessment: Final Exam (it is accessible after the feedback form is filled out).

Additional materials: A summary of the scientific papers and sources relating to the module's topic, along with links to them.



Module 8 - Learning-by-Doing

Overview: In this module, new knowledge acquired after successful completion of previous modules is put into practice and connected with creation of an Action Plan to make changes in sustainability. In the subsections we will look at how success stories can be created and what are they dealing with, then we take an inspiration from Masterclasses, find out how and where to find and contact DIHs from different countries to help with chosen sustainability topic. At the end of the module, we will have a complete Action Plan to lead a circular/more sustain project.

Completion: 17 learning hours

Module status: Mandatory

After completing this module, participants will be able to:

- Understand sustainability as a strategic business challenge and gain inspiration from companies across Central Europe on how they successfully address it.
- Identify how three key industries, ICT, construction, and textiles, are making their manufacturing processes more circular through digitalization.
- Leverage European Digital Innovation Hubs (EDIHs) and maximize the transnational opportunities offered by EU programs to support their sustainability transition.

Chapters Overview:

8.1 Success stories Learning unit is focused on studying a database of success stories (SS) provided by project partners. The aim is to show you possibilities on how to build your own success story, to take an inspiration and so on.

8.2 Masterclasses Masterclass is a presentation, that helps with deep dive in topic related to circular economy. It is held by professionals from different organization and provide to participant possibility to gain deeper knowledge in certain fields.

8.3 Finding of Solution Provider In this chapter, the participants gain information about the EDIHs, what is their purpose and how can they help making companies/products more digitize and more sustainable. It also encourages participants to visit and seek for help in the EDIHs.

8.4 Pilot/Action This final unit of whole academy connects everything taught in order to make changes. It provides the materials, that can help with making an action plan

Knowledge assessment: Final exam + possibility to upload student's filled action plan

Additional materials: Links to database of EDIHs, Success stories brochure, Template for Action Plan



1.2. Target groups

The final version of CIA was made available to different stakeholders, expanding the pool from 24 testing CiVEs to more than 120 CiVEs in training (more info in D1.4.3). After the project ends, the CIA will remain available to different stakeholders, enabling them to better understand the circular economy and its potential, and to serve as ecosystem enablers from their positions of power.

Table 3 CIA Key Target Groups (source: Project generated, 2025)

Target Groups	Example	Role as a circular ecosystem enabler	Benefits for them
EDIH Staff	Analysts; project managers who want to develop new apps; involving additional EDI staff from the region... DIHs in CE and EU strategic territories.	DIHs are unique entities that have the technical knowledge and expertise and aim to transfer this knowledge to SMEs. By being trained in circularity and how advanced technologies can be used in circular transition, it is believed that DIHs can be enablers and innovation facilitators for SMEs to achieve circularity. The main aim of their involvement is to up-skill the DIH staff so that they can upgrade their knowledge and transfer it to SMEs.	By enrolling them in the academy, DIH staff will gain key knowledge on circular practices and how advanced technologies can be used in the circular transition, giving DIHs staff the opportunity to offer new services to SMEs and be a facilitator of circular transformation through testing and deployment of advanced technologies.
RTOs and BSOs	Clusters, chambers of commerce, research institutes, incubators, etc.	As intermediaries between SMEs, policy and research, these organizations are in a key position to bring knowledge and raise awareness on the importance of circular practices and the role of digital technologies in promoting circularity. With the broader knowledge, these actors can either bring knowledge to the key TGs or foster innovation through new projects, further deepening the knowledge generated with the CIA.	RTOs and BSO staff will get the knowledge and raise awareness on the important topics and potential of advanced technologies towards reaching circularity. They can later on work on awareness raising initiatives to distribute the knowledge gained to the rest of ecosystem or to use these insights as inspiration for next projects.
SMEs	Companies operating in the manufacturing sector with the lack of knowledge on the sustainability topic or advanced technologies for sustainability	The ecosystem analysis carried out by the SC consortium has shown that there is a lack of awareness in the manufacturing sector of the benefits of sustainable practices and advanced technologies, as well as a lack of knowledge about the potential of their use, such as increased efficiency, cost savings, resource optimization, etc. By enrolling SME staff in the Academy, they will acquire the necessary knowledge and be able to implement new sustainable practices.	Employees who join the Academy will gain technical inspiration, knowledge of new technologies, circular economy and sustainable practices and ways to optimize their resources, increase efficiency, save costs and remain innovative; SMEs will have the opportunity to learn from others by reviewing over 120 success stories and best practices, and will have a unique opportunity to implement similar innovations within their organizations.
Policymakers	Local, regional and national public authorities.	In order to develop the right ecosystem for the implementation of circular innovations, a strong institutional framework needs to be put in place. As in the analysis of challenges for policymakers carried out by the SC consortium, it was outlined that there are some knowledge gaps when it comes to circular practices. By allowing stakeholders to join the course, they will gain new insights into technological	Gain insights into current technological advances and the circular transition, enabling policymakers to follow the trends and create instruments and policies that support SMEs in implementing circular practices.



		advances and innovative circular solutions.	
Students and trainees	Students from different universities, business as well as technology field.	As students and trainees are future holders of the industry, the sustainable thinking should be incorporated into their education from an early stage. The Academy will give them insights into the more practical part of the circularity, through the 120+ success stories and the case study to be completed, as well as through various courses and additional resources provided on the Academy.	Students and trainees will have access to a mix of theoretical and practical knowledge, allowing them to learn more about circular practices and advanced technologies. This is especially beneficial for students who are not majoring in these fields, but for example only in technology, so that they can gain insights into circular practices and the ways in which technological solutions can be used to implement circularity; or for students who are specializing in circular transition but don't have the knowledge of advanced technologies.



2. Part two - Platform Legal Form/Adoption Concept and Sustainability

This section showcases the final CIA Solution and reflects on the CIA platform legal form/adoption concept agreed by the full consortium, led by the WP1 core group and captured in the [Annex 5](#) document.

2.1. Platform ownership and consortium rights

Ownership

Physical ownership of the platform will remain with FB, and the platform will remain on the Hochschule Burgenland Moodle, with FB committing to maintain it for at least five years after the project ends, including basic technical functionality and hosting.

Each Module Owner will be granted editing access and will be the central editing person in case they decide to add new content to the platform. Other project partners will have to request access, and depending on the need or activity, editing access will be provided upon request and subject to approval. Module Owners remain responsible for the quality, relevance, and consistency of the content within their respective modules.

All partners jointly own the content of the Academy, as they co-worked and co-developed all 8 modules. The content may be further used, adapted, and disseminated by the partners in line with the agreed project rules and applicable intellectual property regulations.

Access

By enrolling in the Moodle platform and the Academy, all participants are granted reading access only, without any option to edit the content, and may use it solely for learning purposes. Users must comply with the platform's User Policy and Data Protection rules.

FB retains full administrative access to the content and to the platform, while the Module Owners receive editing access for their respective modules. Any substantial structural changes to the platform require prior coordination with FB.

Each PP has full reading access to the content of the Academy and may share it internally within their organization, allowing their team members to use the Academy, as well as externally, allowing their networks to access and use the Academy.

2.2. Platform functionality

Continuous recruitment of CiVEs

To keep attracting new CiVEs (platform users), PPs will disseminate the information through DIHs, different networks and follow-up activities indicated in the LoCs (see Section 2.4), ensuring the embedding of the platform and linking it with other platforms, therefore ensuring wider outreach. PPs will also promote the platform internally, allowing their staff members to access and use the platform to upgrade their skills in digitally driven circularity.

The platform will remain available for a **minimum of 5 years after the project ends**, and after depending on new funding opportunities.

Responsibility:

FB is responsible for granting access to the platform and ensuring that each future CiVE receives access, and the full consortium is responsible for promoting the Academy and inviting new learners to join.



Communication of the platform:

All the information on how to register for the Moodle course are available on the official Smart Circuit project page: [The Circular Innovation Academy is live! - Interreg Central Europe](#)

The password is not directly visible. As the platform owner, Forschung Burgenland will provide the password for the Moodle course to interested stakeholders upon request.

New Content and Module Updates

The content will be uploaded voluntarily by the project partners, depending on the opportunities and funding options. Based on the access discussed in the previous section, if any of the PPs gets an opportunity to update the modules, they will do so according to the access limitations and with the approval of FB and the Module Owners, ensuring the quality and relevance of the new content.

Feedback mechanisms that remain in place:

- **Overall Course Evaluation** - allowing feedback on the general platform and its functionality. CiVEs can complete this form without completing the specific modules; it focuses more on the overall functionality.
- **Module Feedback Form** - feedback linked to each module, with specific questions designed to gather feedback and suggestions for the improvement of each module.

Based on this feedback, FB will, if an appropriate opportunity arises, make the suggested changes to ensure the basic functionality of the platform.

2.3. Legal and Regulatory aspects

Legal Aspects

The maintenance and long-term use of the platform comply with the applicable legal and institutional regulations of FB.

GDPR and Data Protection

User registration on the platform is linked to GDPR compliance in accordance with FB regulations. All trainees must complete the registration process, which includes acknowledgment of data protection requirements.

Secure storage and processing of personal data are ensured according to FB regulations. In line with GDPR principles, only persons with editing rights may have visibility of participant data where necessary for course administration purposes, and users are informed accordingly.

Intellectual Property Rights (IPR)

Intellectual property rights are addressed through a disclaimer that forms part of the registration process. The disclaimer clearly states that copying or distributing content without written permission from the respective Module Owner is not permitted.

To further protect intellectual property:

- Downloading content by students is not possible.
- Content use restrictions are clearly communicated during registration.
- All Module Owners have confirmed that copyright considerations were taken into account during the content development process.



Plagiarism and Referencing

Module Owners confirmed that copyright compliance was ensured during the preparation of the materials. The process for confirming proper referencing and originality of content will be further explained in the relevant section.

Certification

Participants receive a final certification of participation, which includes the content of the completed modules.

2.4. Strategy to ensure sustainability

This section presents the strategy and the commitment of the full consortium to ensure the long-term sustainability of the Circular Innovation Academy by integrating it into other platforms, linking it with DIHs, offering it to students through universities, and disseminating it widely through the partners' initiatives.

To ensure proper dissemination and exploitation of the Circular Innovation Academy, each project partner has defined an exploitation and dissemination path to increase the outreach of the Academy to the key target groups. As the consortium includes BSOs, research organizations, universities, chambers, and other institutions, the partners have access to all target groups mentioned in Section 1.2.

CIA Strategy to ensure sustainability

Based on the PPs' dissemination and exploitation paths, the CIA Strategy to ensure sustainability has been created and contains five main pillars targeting different stakeholders.

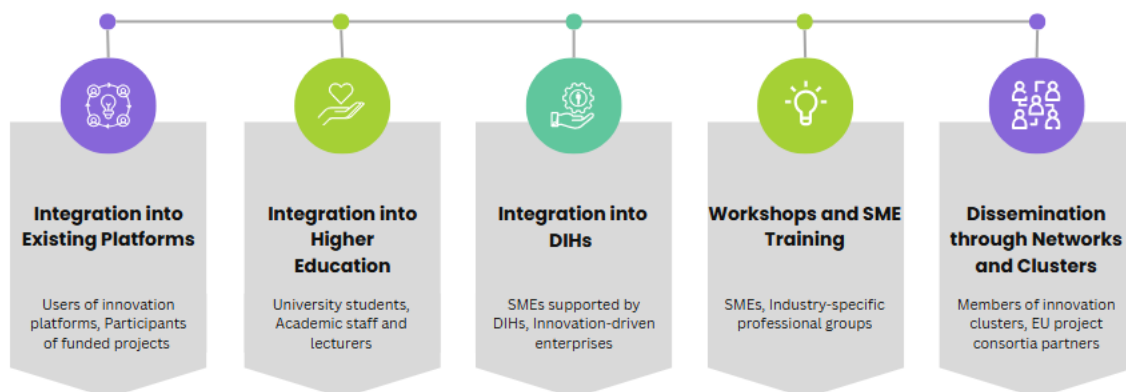


Illustration 3 CIA Strategy to ensure sustainability (source: Author generated, 2026)

Integration into Existing Platforms

The CIA is embedded into established innovation platforms and project websites to ensure long-term visibility and access. The platform is hosted on university Moodle systems and anchored within existing digital ecosystems. Selected modules are integrated into DIH services and used within funded projects, ensuring continued relevance and sustainability.

Integration into Higher Education

The Academy is offered to students through universities and higher education institutions as extra-curricular and voluntary learning. Workshops on circularity are integrated into engineering and applied sciences programmes. The platform is promoted through university communication channels and made accessible via institutional systems.

Integration into DIHs

The CIA is integrated into Digital Innovation Hubs as part of their service portfolios. Selected modules are linked to maturity and environmental assessments and may be customised for DIH users. The Academy is



offered through DIH Connect and in cooperation with EDIHs, supporting digitally driven circular transformation.

Workshops and SME-Training

The CIA serves as a basis for SME trainings and practical workshops delivered through DIHs, clusters, and future capitalisation projects. It supports industry-specific workshops and may lead to sector-specific module development, depending on follow-up projects and funding opportunities.

Dissemination through Networks and Clusters

The Academy is promoted through innovation clusters, chambers of commerce, professional associations, and EU project consortia. Partners disseminate the platform through their networks, inform industry members and SRIPs, and share it with Alpine Space and other EU project partners to ensure wider outreach and long-term exploitation.

This strategy outlines the coordinated approach and contributions of all partners, which will be confirmed through the signing of the joint Letter of Commitment (Section 3).

Table 4 PPs Individual Commitment to ensuring CIA's long-term sustainability (source: Project generated, 2026)

Partner (PP)	Declared commitment / follow-up action
LP1/KPT	Within commitment by Krakow Technology Park, the Circular Innovation Academy by SMART CIRCUIT has been anchored: B2Green platform https://www.b2greenhub.eu/ European Network of Living Labs https://enoll.org/
PP2/FB	The CIA platform will be hosted on the Hochschule Burgenland Moodle platform for at least five (5) years and will provide maintenance and minimum technical support necessary to ensure reliable operation. The CIA curriculum will be promoted among students of Hochschule Burgenland, for example through appropriate communication channels.
PP3/PRO	Where possible, PROFACTOR will promote/publish the Link to the Circular Innovation Academy on Project Webpages related to the topics of SMART CIRCUIT
PP4/IWU	Fraunhofer IWU as partner of innovation cluster Circular Saxony, will promote the Circular Innovation Academy in other projects related to the topics of SMART CIRCUIT. Besides, IWU is going to reach out to Dual University of Applied Sciences Saxony (engineering degree program) to integrate a workshop about circularity, especially using the CIA platform.
PP5/mtSW	microTEC Südwest will sort out which content especially of module 5 could be used in the EFRE funded project microTEC SkillsLab where innovative trainings will be developed and tested.
PP6/SIIT	Through their DIHs, SIIT Ligurian Technological District Integrated Intelligent Systems offers the maturity assessment; extends it toward an environment assessment. In the future, based on results, it is considered to customize parts of CIA modules for DIHs/users.
PP7/COMET	COMET Scrl - Friuli Venezia Giulia Mechanical Engineering Cluster commitment is to promote CIA to RE-INCITE (www.alpine-space.eu/project/re-incite) and BeSoGreat (www.besogreat.eu) project partners; possible development of a new industry-specific module (mechanical engineering / injection moulding), depending on follow-up projects.



PP8/TECOS	TECOS - Slovenian Tool and Die Development Centre commits to supporting the long-term sustainability of the CIA Academy online platform. After the end of the SMART CIRCUIT project, TECOS will regularly inform students of the Higher Education Institution in Production Engineering in Celje, the members of the Slovenian tool and die and metal processing industry association, and the members of the SRIP Factories of the Future in Slovenia, as well as wider stakeholders, including through the TECOS website and other communication channels.
PP9/PBN	Pannon Business Network Association explores opportunities to integrate selected CIA modules into PBN DIH services, especially aligned with current DIH activity (priority interest: Modules 3 & 4, but potentially all). Updates depend on follow-up projects.
PP10/TUKE	Technical University of Kosice commitment is to use the platform for students (extra-curricular/voluntary learning), SME trainings (DIH/Circular Hub services) and future capitalisation projects
PP11/INTEMAC	Intemac Solutions ltd declares to maintain access to the platform, making it available for students, and offer access in cooperation with EDIH.
PP12/HGK	Croatian Chamber of Economy Varaždin County commitment is to provide access to CIA via DIH Connect; exploring translation of selected modules into Croatian; using the content as a key resource for the next project.

In addition to the PPs' individual exploitation and dissemination pathways to ensure the long-term sustainability of the CIA, PPs also use the yearly meetings organized as part of the D3.4.2 Cross-sectoral Flagship to discuss potential upgrades of the CIA within new initiatives and projects that PPs plan to develop. PPs also consider the exploitation pathway of using the CIA in projects to be prepared in the next funding period, providing space for discussion and assessment of opportunities for new project submissions. Online meetings are organised and facilitated by following PPs:

Year	Partner responsible
Year 2027	KPT
Year 2028	mtSW
Year 2029	TUKE
Year 2030	TECOS
Year 2031	PBN



3. Part 3 - Ensuring the Commitment - Signing the LoCs

This section reflects the approach of the consortium to ensure the long-term sustainability of the Circular Innovation Academy. As already demonstrated, long-term sustainability will be achieved through exploitation and dissemination initiatives of the full consortium, as well as through yearly meetings (as part of the D3.4.2 Cross-sectoral Flagship), where PPs will discuss potential new projects and initiatives and start preparing for a new funding period, during which opportunities for embedding the CIA could emerge.

To demonstrate this, PPs will sign Letters of Commitment showcasing their plans to ensure the long-term sustainability of the project's results in their regions.

Besides this, the aim is also for the results to be taken up not only by the PPs but also by Associated Partners, expanding the impact of the project.

Considering this, two types of LoCs are created:

- LoC for the Consortium
- LoC for the partnering organizations

3.1. LoC for the consortium

It has been agreed by the consortium that the commitment for the uptake and expansion of the results from all three WPs (linked with D1.4.2, D2.4.3, and D3.4.2) will be combined into one document, to reduce bureaucratic efforts and showcase the interlinks between different activities.

The LoC (see [Annex 2](#)) has been divided into three parts, one for each WP. PPs indicated their commitment for each WP, but in this deliverable the main focus will be on WP1.

The WP1 section is mainly focused on ensuring the long-term sustainability of the CIA, which will be achieved by individual PPs efforts. Additionally, the section outlines PPs' commitment to participate in yearly consortium meetings in the five years following the end of the project, bringing knowledge and best practices from the projects they have identified as cross-sectoral pilots, as well as brainstorming on potential new projects, where some opportunity for the upgrade of the CIA may emerge.

Signing process:

One LoC document will be created through the efforts of D1.4.2, D2.4.3, and D3.4.2, in this case PP2/FB, PP3/PRO, and PP6/SIIT, combining all inputs from PPs outlining their commitment. All PPs will sign one document in 12 copies, ensuring that each PP receives a copy, meaning that the document will be signed multilaterally.

The document should be signed by **6 March 2026** to sign it. During the in-person PP meeting in Slovenia, PPs will exchange the signed documents.

All PPs should upload their LoCs [here](#) (path: WP3 -> A3.4 -> D3.4.2 -> LoCs -> LoC for the Consortium).

3.2. LoC for the partnering organizations

In addition to the Consortium LoC, PPs will also sign LoCs with their partnering organizations, Associated Partners. The aim is to ensure the uptake of the project results beyond the consortium, enabling knowledge transfer and wider impact.

Each PP is tasked with creating the content of the LoC with their ASPs, documenting which results will be taken up by the ASPs from WP1, WP2, and WP3.



The template is created (see [Annex 3](#)), allowing PPs the freedom to enter information depending on the agreement and the interests of the ASPs in specific results. ASPs can take up one result or more, and it is not mandatory to take up all of them. When it comes to WP1, ASPs can use the CIA for the upskilling of their teams, integrate the CIA into initiatives within their own organizations or regions, or promote the CIA on their websites and other channels and encourage new members to apply. They can also suggest upgrades to the curriculum.

Signing process:

The LoC document template will be created by the joint effort of partnering organizations responsible for D1.4.2, D2.4.3, and D3.4.2, in this case PP2/FB, PP3/PRO, and PP6/SIIT. Each PP will discuss with their ASPs, agree on the results they want to take up, and sign the document bilaterally.

The template ([Annex 3](#)) is created, ensuring freedom for PPs to determine its content. Some examples will be included for WP1, but PPs do not have to follow the suggested approach and can add the agreed commitments, ensuring maximized impact.

The document should be signed by **20 March 2026**.

All PPs should upload their LoCs [here](#) (path: WP3 -> A3.4 -> D3.4.2 -> LoCs -> LoC for Partnering Organizations).

The table below showcases the timeline:

Task to achieve	Deadline	Responsibilities
LoC for the consortium signed by all PPs	06.03.2026	All PPs
LoC for the consortium exchanged	13.03.2026	LP1/KPT
LoC for the partnering organizations signed by PPs and ASPs	20.03.2026	All PPs



Conclusion and Next Steps

1. Conclusion

The purpose of this document has been to showcase the final CIA curriculum, the legal aspects of the CIA adoption, and the strategy to ensure the long-term sustainability of the Academy. The report presents:

- The key takeaways from the background research activities and stakeholder engagement to create the best CIA solution
- The update of the modules and the creation of the final CIA curriculum
- The process and responsibilities related to the legal aspects of the Academy, as well as the adoption concept
- The strategy for the long-term sustainability of the CIA
- The process for signing the Letters of Commitment to ensure the commitment of PPs to the long-term sustainability

The document has provided critical background knowledge about the project and the key steps for above-mentioned activities

2. Next Steps

This section outlines all the necessary steps to successfully establish a long-term CIA Solution concept.

Task to achieve	Deadline	Responsibilities (RACI methodology)
Draft version of the report ready for the review by the consortium	03.03.2026	R: PP2/FB; A: PP2/FB; C: PP5/mtSW, LP1/KPT, PP7/COMET
LoC for the consortium signed by all PPs	06.03.2026	R: All PPs; A: PP2/FB (WP1, WP3), PP3/PRO, PP6/SIIT (WP2);
PPs review the report and send their feedback	11.03.2026	R: All PPs; A: PP2/FB
LoC for the consortium exchanged	13.03.2026	R: All PPs; A: LP1/KPT
LoC for the partnering organizations signed by PPs and ASPs	20.03.2026	R: All PPs; A: PP2/FB (WP1, WP3), PP3/PRO, PP6/SIIT (WP2);
Feedback integrated into D1.4.2	20.03.2026	R: PP2/FB; A: PP2/FB;
The final version of D1.4.2 ready	20.03.2026	R: PP2/FB; A: PP2/FB;



E. Annex

Annex 1 - CIA Solution Template

This Annex serves as a guide for PPs to create the final CIA Solution structure and can be found at the following [link](#).

CIA Solution	
<p><i>This template serves as a unique guide for all PPs on the final structure and various aspects of the Circular Innovation Academy. The WP1 Core Group will collaborate to define the final structure based on input from the full consortium during the co-creation workshop in Hungary. This document will be finalized by May 13th and presented to the Consortium.</i></p>	
CIA Basics	
CIA Main Objectives	
CIA Key Target Groups	
Info materials <i>Describe all the information materials that will be provided to CiVEs to help them complete their learning journey.</i>	<input type="checkbox"/> CIA Guide <input type="checkbox"/> CiVE Check-list <input type="checkbox"/> Recorded webinar and training <input type="checkbox"/> Other...
Overall Validation form <i>Describe the aim of the overall validation form.</i>	
Timeline <i>Specify the timeframe for CiVEs to complete these modules after registration.</i>	Modules 1-7: Module 8:
Communication Channels	
<p><i>Specify the means of communication with CiVEs and how often they will be used throughout the project. Also, consider the methods and frequency of communication with CiVEs after the project ends.</i></p>	
Moodle Forum	
Information via email	
Check-ins with CiVEs	
CIA Structure	
Module 1 - Fundamentals of Digitally Driven Circular Economy	
Brief description <i>Outline the key objectives of the module and the knowledge participants will gain upon completion.</i>	This module introduces the <u>digitally-driven</u> circular economy, focusing on how IoT, AI, blockchain, and data analytics enable circular practices. Participants will explore business models, regulatory frameworks, impact measurement, and emerging trends, equipping them with practical tools to transition from linear to circular systems.
Status	<input checked="" type="checkbox"/> Mandatory Module <input type="checkbox"/> Optional Module

Annex 2 - LoC for the Consortium

This section showcases the [Letter of Commitment](#) signed by all PPs. The main aim of the document is to showcase PPs' commitment to ensuring the long-term sustainability of the project's results. The template can be found here. PPs have to upload the signed letters by 6 March 2026 [here](#).



1. Objective of the Letter of Commitment

The objective of SMART CIRCUIT is to promote the role of the DIH network and its actors in accelerating the adoption of a digital/tech-driven circular economy, enabling a resource-efficient and competitive transition in CE manufacturing. To achieve this, project partners fostered three transnational solution systems: WP1 - the Circular Innovation Academy (CIA); WP2 - the Circular Industry Strategy Lab (STRATLAB); and WP3 - the Circular Industry Factory (FACTORY). These systems bring benefits to multiple stakeholders (enterprises, policymakers, RTOs, BSOs, etc.) and deliver a transnational approach at the intersection of digital, RIS3 and circular economy strategies.

This Letter of Commitment (hereinafter referred to as Letter or LoC) serves to outline the commitment of project partners (PP) to ensure the integration and transfer of the three transnational solution systems (CIA, STRATLAB, FACTORY), to support their long-term sustainability, and to maintain continuous cooperation with the Smart Circuit consortium after the completion of the project.

By signing this Letter, **the full consortium** commits to ensuring the long-term sustainability of (1) the WP1 Circular Innovation Academy for ongoing upskilling of professionals in a pan-EU context (linked to D1.4.2); (2) the WP2 transnational solution method for policy-industry engagement via the Circular and RIS3 Strategy Lab (linked to D2.4.3); and (3) the WP3 transnational solution on the Factory, including the next steps to bring four Flagship Solution Models to the market (linked to D3.4.2).

2. Scope and goals of LoC

To ensure the long-term sustainability of the three Smart Circuit solution systems, **Project Partner** commit:

- In relation to the WP1 Circular Innovation Academy (CIA) for ongoing upskilling of professionals in a pan-EU context (linked to D1.4.2) to:
 - LP1/KPT: B2Green Project PPT Presentation, Task Force by European Network of Living Labs. EU circular innovation Academy? Translate some of the modules into Polish and offer them locally.
 - PP2/FB: Keep the Moodle platform running for at least 5 years
 - PP3/PRO: a link to the Moodle platform will be provided on the EDIH AISinnovation Webpage, which will be shown in the section of International Networks & Collaborations within AISinnovation ([Networking | AISinnovation](#)). FB continues to keep the Moodle platform running.
 - PP4/IWU: contact to universities / maybe there is the possibility to find connections to advertise them / updating difficult
 - PP5/mTSW: EFRE project of mTSW (project accepted); exact way to use content to be defined, e.g. translating the Electronics Module into German and using it as a base for a new regional project.
 - PP6/SIIT: Their digital innovation hubs offer the maturity assessment and as part of our pilot activities we are helping the digital innovation hubs in extending their maturity assessment into an environment assessment and based on the results of the assessment they can customize some part of the modules within the CIA
 - PP7/COMET: Promotion to RE-INCITE and BeSoGreat project partners. Eventually available to create from scratch a new "module" more linked to our industry (Mechanical engineering / injection moulding). ~~Also dependings~~ on the follow up projects.
 - PP8/TECOS: Can be linked to CIRCOTRONIC I need to CIRCOTRONIC coordinator how
 - PP9/PBN: Explore integration of selected CIA modules into the PBN Digital Innovation Hub services, especially those related to the current activity of the DIH. Module 3 & 4 (but of course all) / updating ~~dependings~~ on the follow up projects



Annex 3 - LoC for the Partnering Organizations

This section showcases the [Letters of Commitment](#) signed by PPs and their partnering organizations (bilaterally). The main aim of the document is to showcase the transfer and uptake of the project results by new organizations.

PPs have to upload the signed letters by 20 March 2026 [here](#).

1. Objective of the Letter of Commitment

The objective of SMART CIRCUIT is to promote the role of the DIH network and its actors in accelerating the adoption of a digital/tech-driven circular economy, enabling a resource-efficient and competitive transition in CE manufacturing. To achieve this, project partners fostered three transnational solution systems: WP1 - the Circular Innovation Academy (CIA); WP2 - the Circular Industry Strategy Lab (STRATLAB); and WP3 - the Circular Industry Factory (FACTORY). These systems bring benefits to multiple stakeholders (enterprises, policymakers, RTOs, BSOs, etc.) and deliver a transnational approach at the intersection of digital, RIS3 and circular economy strategies.

The objective of this letter is to formalize the relationship between **[name of the PP]** and the **[name of the partnering organization]** regarding the follow-up steps to ensure the project results (CIA, STRATLAB and FACTORY) long-term sustainability through collaboration and knowledge transfer.

2. Scope and goals of LoC

1. In relation to the WP1 Circular Innovation Academy (CIA) for ongoing upskilling of professionals in a pan-EU context, **[name of the partnering organization]** commits to:
 - Promote the CIA on their social media channels and make it available on their website.
 - Promote the CIA on the websites of their associated Digital Innovation Hubs.
 - Offer the CIA as internal training for the employees in their organization.
 - Establish connections between the CIA and other relevant platforms (how, which platforms, which Modules)
2. In relation to the WP2 transnational solution method for policy-industry engagement via the Circular and RIS3 Strategy Lab, **[name of the partnering organization]** commits to:
 - Add
 - Add
 - Add
3. In relation to the the WP3 transnational solution on the Factory, including the next steps to bring four Flagship Solution Models to the market, **[name of the partnering organization]** commits to:
 - Learn form and/or uptake the following services from the D3.1.3 Service Portfolios and D3.3.3 Piloted Solutions into their offer or to their ecosystem: **name the services**
 - Participate in the cross-sectoral Flagship with the entire consortium, consisting of **yearly meetings** (once per year). This includes sharing unique knowledge, experiences, and insights from new projects, inviting the consortium to events, conferences, and other activities, and ensuring ongoing knowledge exchange.

3. Duration and Timeline

- This Letter of Commitment demonstrates the commitment between the **[name of the PP]** and the **[name of the partnering organization]** and shall remain in force until all obligations set out herein have been fulfilled, and in any case no later than five years after the end of the project (31.03.2031).
- This Letter has been created to ensure the commitment of the project partners and associated partners to the long-term sustainability of the three transnational solution systems (CIA, STRATLAB, FACTORY) developed within the project, committing them to expanding the knowledge generated, integrating the results into their own ecosystems or disseminating them within their networks, and continuing their cooperation within the Smart Circuit consortium.
- The signature of a Party affixed either as a scanned image of a handwritten signature (e.g., in PDF format) or via an electronic signature (e.g., through **DocuSign** or a similar platform) shall have the same legal force and effect as an original handwritten signature for the purposes of validity, enforceability, and admissibility. Delivery of the signed version of this Letter by email or through an



Annex 4 - Platform/Training Mapping Excel Sheet

This annex served as a space where PPs can identify different existing platforms and trainings on the topics relevant to the sustainability and circular economy and is available at the following [link](#).

PP	Platform / Training program (name of course or topic)	Training program description (short description of objectives, content, and other public relations or similar activities)	The aim of the platform where the course/training is provided	Key VE value for the training	Institutional Model (name of all owners)	If none of these apply for the institutional model, write what does.	Business & Legal Structures (name of all owners)	If none of these apply for the Business & Legal Structures, write what does.	Technology & Deployment Forms (name of all owners)	If none of these apply for Technology & Deployment Forms, write what does.	Certification & Recognition (name of all owners)	If none of these apply for Certification & Recognition, write what does.
UP/MT	Green Path Academy https://actonera.com/en/our-offers	Green 4.0, Interreg CE, B20centrik platform empowers manufacturing companies to lead in sustainability and digital transformation. We connect companies with green and digital service providers that offer top-tier expertise, advanced testing facilities, and innovative solutions. Through tailored support B20centrik platform helps companies to recognize their green and digital potential and provide guidance on their way to sustainable growth and market leadership.	B20centrik supports businesses in their green and digital transformation with expert-led training and resources. This section covers sustainability, smart manufacturing, open innovation, and digital business models to help companies stay competitive and future-ready. Participants will learn about green technologies, smart and digital manufacturing, sustainable production, and funding opportunities to support innovation and growth.	COG and Sustainability Managers, Managing Director, Product Managers, and employees involved in sustainability topics, Business and Early Career Professionals, Employees in Manufacturing and Technology Companies, Managers and Organizational Leaders, Startups and Entrepreneurs, Business Support Institutions, and Public Administration	Economic Development & BSC Platform/Training			Standalone Platform	How standalone platform but we are starting to include it into B20centrik platform within Green 4.0 project			
PP2/FB	TVU Austria Akademie https://www.tvu-akademie.at/en Studen & Technology Transfer Zentrum Wien https://www.sttz.at/en/aktuelles/circular-economy-kreislaufwirtschaft/ MS Akademie https://www.msakademie.com/en	Funded by Interreg	The training provides a practical introduction to Circular Economy principles, covering business models, design, policy, and systems thinking. The training enables participants to develop sustainability strategies, write corporate sustainability reports (including on climate and circular economy), and take responsibility for sustainability management and implementation. This training empowers to integrate circular strategies, improve resource efficiency, apply eco-design, and enhance sustainability reporting – making you a key driver of the Circular Economy in your organization.	Executives, organizational developers, HR managers, CSR and sustainability officers, corporate waste and environmental officers, and employees in administrative or financial roles.	Corporate Training Academy	For Profit Business		Standalone Platform	Accredited Certification Provider			
PP3/PRO					University-Affiliated Platform/Training	Cooperative Model		Standalone Platform	Project Oriented			
PP4/MSU					Government Sponsored	Not a funded project		Marketplace Model	MSU under discussion			MSU under discussion

Annex 5 - CIA long-term strategy template

This template ensures that the strategy for the long-term platform sustainability is well elaborated. The link can be found [here](#). PP2/FB is responsible for completing this form by the end of November 2025.

CIA Long-term sustainability template	
<p><i>This template aims to capture the final adoption concept for the CIA and the strategy to ensure the sustainability of the platform.</i></p> <p><i>This template is to be completed by the PP2/FB, summarizing the inputs from the co-creation session in Croatia, discussions with TPs and ASPs and the final decision of the WP1 core group.</i></p>	
Platform ownership and consortium's rights	
Describe the ownership structure of the platform and the curriculum.	
Define who has full access to the platform, who has limited access, and who doesn't have access at all. Take into consideration the possibility of a curriculum update and whether all PPs will have access to it.	
Are you planning to integrate the platform with any other training platform, training course, or initiative? Please describe.	
Are you planning to submit a follow-up project to further upgrade the platform?	
Are you planning to charge users for access to the platform, and how will you manage financial transactions securely and legally?	
Platform functionality	
Describe how you plan to continue recruiting CiVEs and for how long.	



Who is responsible for this?	
What is the number of additional trainees you plan to have?	
Describe how you plan to add new content and regularly update the curriculum. Indicate how often the curriculum will be updated and by whom.	
Who is responsible for this?	
Explain if you plan to continue benchmarking the platform and conducting check-ins with TPs and ASPs to ensure the platform's attractiveness, and how you will do this.	
Who is responsible for this?	
What user feedback mechanisms will be in place to improve the platform's user experience (CiVEs Check-ins, Q&A session sor something else)?	
Explain who from the consortium will continue to be involved in the process of ensuring the platform's sustainability.	
Explain how you plan to communicate, organize yourselves, and meet after the end of the project.	
How do you plan to finance your work and the continuation of the Academy?	
Legal and regulatory aspects	
What laws and regulations do you need to comply with in order to maintain this platform and ensure data safety, GDPR compliance, and IPR?	
What measures are in place to comply with international laws if the platform operates in multiple countries?	
Are you planning to offer any official certification for your course?	
Are you planning to connect with any other entities?	
Have you ensured that the content on the platform is properly referenced and free from plagiarism?	
How will you protect the intellectual property of the content creators and the platform itself?	
How do you plan to ensure that new trainees registering on the platform are compliant with GDPR?	
What steps are in place to guarantee secure storage and transfer of personal data?	



Abbreviations

Abbreviation	Explanation
AF	Application Form
ASP	Associated Partner
CA/PA	Consortium Agreement/ Partnership Agreement
CE	Central Europe
CIA	Circular Innovation Academy
CIDCs	Circular Innovation and Development Corridors
CiVEs	Circular Value Translation Engineers
DIH	Digital Innovation Hub
PP	Project Partner
RIS3	Research and Innovation Strategies for Smart Specialisation
SB	Strategic Board
TF	Task Force
TP	Technical Panel/Expert
TMM	Transnational Mobility Missions
WP	Work Package