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SMART CIRCUIT

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A.2 Project summary

Please give a short overview of the project and describe:

- the common challenge of the programme area your project is tackling;
- the overall project objective and the expected change your project will make to the current situation;
- what is innovative about your project;
- the main outputs and results your project will develop and who will benefit from them;
- the implementation approach you plan to take and why transnational cooperation is needed.

Growth in Central Europe (CE) manufacturing is characterised by high resource use, waste & emissions, especially in select value-chains (VCs) (e.g: electronics/ICT; construction; textiles). Circular Economy (CircEc) is key to address this & closing key VC loops is crucial, but gaps remain. CircEc grows in CE, but a lag exists & effort is needed to help territories (e.g. HR, PL, CZ, SO, HU) catch up & bridge the gap. Digital/technology-driven business models (powered by ICT, data & new tech) enables manufacturing CircEc & promotes a competitive-edge in CE, but mixed access remains. SMART CIRCUIT's objective is to foster the uptake of digital & tech-driven CircEc to CE manufacturing via a connected network of Digital Innovation Hubs (DIHs) & test/roll-out multi-stakeholder solutions to fast-track adoption of CircEc to enable a resource-efficient & competitive transition in key CE VCs (focus on 3 resource intense VCs + CircEc VC). DIHs were tested in CE territories for digital transformation but the approach to advance CircEc was not yet tested & has good potential. 12 PPs (+ 24 ASPs) in 9 CE Countries foster 3 joint transnat. multi-stakeholder (Enterprises/Policy/RTO/BSO etc) solutions & deliver an aligned approach for digital/CircEc/RIS strategies. PPs establish 8 Outputs: 3 pilots, 3 solutions, 1 strategy enabled by 1 cooperation net (4 task forces). WP1's Circular Innovation Academy builds stakeholder capacities; WP2's Strategy Lab & Industry Futures Strategy /Plan leverages dialogue to enhance policy-maker/financial action towards circular adoption; & WP3' s Circular Industry Factory promotes action-oriented upgrades in 60+ enterprises of 4 VCs. The approach fosters existing DIHs to transnationally address excellent solution transfer from high-to-low areas of CircEc, spreading excellence & bridging operational/strategic gaps. Only via cooperation (in territories, strategies, VCs, stakeholders) can CircEc enable regenerative growth & CE manufacturing competitiveness.

C.2 Project relevance and context

C.2.1 What are the territorial challenge(s) that will be tackled by your project?

Please describe which specific challenges and needs are addressed by your project and why they are relevant for the overall programme area, (please refer to chapter 1 and 2 of the Interreg CENTRAL EUROPE Programme document).

The ecological dimension of economic transformation is critical to address, as emissions & high-resource use still characterises economic growth in Central Europe (CE), especially in manufacturing & production sectors (with high energy use, waste production, toxic & greenhouse gas (GHG) emissions, e.g sectoral significance: electronics/ict = less than 40% waste recycled; construction /building = responsible for over 35% of EU total waste generation + 5-12% of total GHG emissions; textile = less than 1% recycled). CircEc provides economic, environmental & social development procedures to jointly address creating regenerative growth & shared value. A critical aspect doing this is to not increase consumption of resources & maintain value of products, materials and resources (for as long as possible), closing-the-loop & moving away from 'take-make-dispose' linear production chains. The EU Circular Economy Action Plan (CEAP)'s initiatives are critical to champion CE integration across key production VCs, but remain at early stages across the territory w/ regulatory /legislative understanding, interpretation & action varied & intermittent (especially where multiple-strategies converge). CircEc is growing in CE, but a lag exists behind the EU average & special effort is needed to help territories (HR, PL, CZ, SO, HU) catch up & bridge the gap (pg 7 Interreg CE Doc). The EU CEAP envisage wide-spread sectoral change in Construction, Textiles & Electronics (+ more), where there is high resource use & high potential for circularity. The manufacturing industry & its support eco-system plays an important role in the transition to a more resource efficient economy whilst maintain CE competitiveness. Digital/technology-driven business models (powered by ICT, data and new technologies) are important enablers for growing "circularity" & promoting a competitive-edge in CE, but also remain with mixed access (especially for mainstream players). SMART CIRCUIT operates at this challenge intersect (digital & circular; cross-territory/ cross strategy competitive gaps) & analyses the role that Digital Innovation Hubs (DIHs, as proven tool for advancing digital transformation & specialised/competitive strategy (RIS3/S3) approaches) can play to support key production VCs (& the multi-stakeholder eco-system behind these value chains) to ultimately close-the-loop & create more resource-efficient & competitive economic growth.

C.2.2 How does the project tackle identified challenges and needs and what is new about the approach of your project?

Please describe the project approach chosen to address the challenges and needs described above. Please also explain how the approach goes beyond existing practice in the sector/programme area /participating countries demonstrating the innovativeness of the approach.

A circuit links circular & digital paradigms, an aspect critical to achieving "closing the loop" & enabling digital transformation. These elements are essential for CE manufacturing to be more resource-efficient & globally competitive. SMART CIRCUIT builds from this & operates at the intersect of these concepts to create a connected network of DIHs that foster the adoption & uptake of digital & technology-driven CircEc into CE's manufacturing eco-system. DIHs have been tested in CE territories to advance digital transformation (continues in Digital Europe Program), but the approach of upgrading/upcycling the same infrastructure towards advancing CircEc, has not been tested in the participating countries, thus goes beyond existing practices in the sector & programming area. In SMART CIRCUIT PPs (representing key DIHs in all 9-programme country) analyse, develop & champion the role that DIH networks & actors have to fast-track the essential uptake of digital & CircEc principles to help enable a transition in key CE production VCs towards a smarter, more competitive & sustainable future. The specific approach in the project to address the challenges & needs raised in C.2.1, is to BUILD!, TEST! & EXPAND! multi-stakeholder methodologies via 3 transnational Pilot/Solution systems which aim to enhance capacities, reduce implementation barriers & promote the upgrading of production VCs to deliver more sustainable long-term outcomes. Knowledge, technology & experience is transferred across CE, to promote a bridge between (b/w) territorial spaces & industrial/digital/green strategies. The PPs form greater bonds in & b/w DIH eco-systems (network generation in AT1.1, AT2.1 & AT3.1), & form 4 Strategic Task Forces (TFs) (3 VCs in spotlight: construction/building, textile, electronics/ict +- a mandatory TF on cross-sectoral applications of digital & tech solutions in the circular VC). The TFs formalize operation & focus for the 3 pilot/solution systems. WP1 (CAPACITIES!) develops the Circular Innovation Academy (CIA), focuses on improving the capacities of DIH eco-system players (RTOs, BSOs & enterprises & policy actors), to adopt circular solutions & policies. The CIA brings together a pool of professionals (Circular Value Translation Engineers, CiVEs), to increase knowledge on CircEc value creation in industry using digital/tech solutions & aims to create common nomenclature & complementary approaches to transnational exchange of solutions/services, aligned to the 4 TFs. WP2 (LEVERAGE!) develops the Circular Industry Futures Strategy Lab (STRATLAB), focusing on brokering dialogue & enhancing exchange for policy-makers on successful applications of CircEc & the policy instruments (cooperation & finance) used. This step aligns multi-stakeholder action to reduce implementation barriers, by promoting transnational forums that bridge strategic gaps & discover action-oriented paths to leverage public & private finance for the adoption of circular solutions. WP3 (UPGRADE!) develops the Circular Industry Futures Factory (FACTORY), focusing on real measures to help enterprises understand & adopt the value-creation opportunities of digital/tech driven CircEc. All PPs participate in the transnational FACTORY pilot aligned to 1 sectoral TF & the cross sectoral TF (2 distinct actions, with enterprises in a transnational environment), building services for a pool of 60 identified enterprises. Finally the Circular Industry Futures Strategy/Action Plan 2030 gives action-oriented next steps & strategic recommendations to bridge the gap & deliver a blueprint for resource-efficiency, competitiveness & regenerative growth in CE Manufacturing.

C.2.3 Why is transnational cooperation needed to achieve the project objectives and results?

Please explain why the project objectives cannot be efficiently reached acting only on a national/regional /local level and describe what is the added value for the partnership and the project area in taking a transnational cooperation approach.

The impact of high-resource use & high-waste/emissions production is not restricted to borders; transnational environmental impact of economic growth impacts across borders due to multi-national manufacturing/product VCs & therefore also must be addressed via transnational approaches/regulation/strategy. EU CEAP brings a pan-EU view of delivering regenerative growth & requires transnational approaches to align interpretation & adoption within the regions. The EU Single-Market requires balanced approaches, or risks exporting the problem to EU-periphery & not effectively closing-the-loop in production. Conversely, the CircEc knowledge & solutions to address these needs is not evenly distributed across the territory & this gap is especially large in CE. Digital technologies, in specific, are an enabler for the upscaling of the circular economy (1) creating & processing data /information required for circular business models & the complex demands of circular supply chains; (2) optimising functionality & developing products-as-a-service, using, i.e. functional electronics, distributed ledger & IoT (3) achieving dematerialisation, using digital twins, artificial intelligence & virtual reality. DIHs have been shown to operate transnationally & bridge these gaps for strategic technology topics, especially with regards to advancing digital transformation of production/manufacturing. SMART CIRCUIT takes advantage of this transnational innovation infrastructure & transnational networks & upgrade/leverage the operation to address the need to transfer know-how & solutions from higher-to-lower areas of circular uptake. All 9 programme countries need to be involved, so no territory is left behind. SMART CIRCUIT focuses on this territory balance, working with high-quality organisations in each territory who have exceptional access to their regional stakeholders (enterprises & policy-makers) as well as cutting-edge research & innovation in digitally-driven circularity. This transnational approach also shows that each region has success stories & each stakeholder has a role to play to take collective accountability for a resource-efficient & competitive Circular Industry Future. Explained in C.2.1, parts of CE lag in uptake of CircEc; regions alone won't be able to gain & spread knowledge; this can only be achieved through exchange among regions by involving regional best-in-class players.

C.2.4 Who will benefit from your project outputs and results?

Please select the target groups from the drop-down list, which are relevant for your project. For each of them please provide a more detailed specification and explain how they will benefit from your project outputs and results. Please ensure consistency with the target groups defined in the work plan (section C4).

Target group	Specification
Local public authority	24 (2/PP) Local Public Authorities (LPAs) are relevant beneficiaries of SMART CIRCUIT. PPs reach local/municipal PAs for innovation (& sustainability) in own area during WP2 STRATLAB BUILD! Phase (interviewed directly in DT2.2.2) + twin with LPA of connected DIH (AT2.1) as part of the expanded network in the delivery of the transnational STRATLAB (CE & EU LPAs) Solution (AT2.3 & 2.4). LPAs gain cross-territory contacts & insight on local support instruments for circular/digital uptake.

Target group	Specification
Regional public authority	24 (2/PP) Regional Public Authorities (RPAs) are relevant beneficiaries of SMART CIRCUIT. PPs reach reg. ministries for technology/innovation /sustainability in own area, during WP2 STRATLAB BUILD! Phase (interview in DT2.2.2) + twin (12+) with RPAs in transnational STRATLAB (AT2.3 & 2.4) (e.g. South Tyrol, Vorarlberg, Thuringia etc.). RPAs gain excellence results for Sustainable S3 (now S4), support instruments & collaboration for implementation + forums for territorial cross-fertilization.
National public authority	9 (1/PP) National Public Authorities (NPAs) are relevant beneficiaries of SMART CIRCUIT. NPAs' Departments on innovation/tech/digitalisation /sustainability from PP countries (AT,CZ,DE,HR,HU,IT,PL,SK,SI) are engaged during WP2 STRATLAB BUILD! Phase (interviewed in DT2.2.2) & are included in Pilot TEST! & Solution EXPAND! Phase. NPAs gain new knowledge on territory policy & support instruments + techniques to leverage public-private support for adopting industrial circular/digital solutions.
Sectoral agency	12 (1/PP) sectoral agencies (SAs) are relevant beneficiaries of SMART CIRCUIT. PPs focus on engaging reg. development & energy/ sustainability agencies in the territories addressed. Target Groups (TGs) invited to the regional round-tables (DT1.1.3) & also the WP2 STRATLAB pilot & solution activities (AT2.3 & 2.4) to provide experience & knowledge of good practices & opportunities to leverage across development & energy strategic initiatives. Sectoral agencies gain new insights from these forums.
Infrastructure and (public) service provider	12 (1/PP) Infrastructure & Public Service Providers (I&PSPs) are relevant beneficiaries of SMART CIRCUIT, especially focusing on utility providers (spotlight: Energy). Energy Producers & Suppliers bring success stories & receive knowledge of other territory successes + can also be addressed to receive cross-sectoral (strategic Task Force, TF, 4) circular value-chain support as part of the 4th joint-transnational pilot (knowledge supplier & receiver). (Ex: Energy Burgenland).
Higher education and research organisations	40 (3/PP + 7/LP), higher education & research organisations (RTOs) are relevant beneficiaries of SMART CIRCUIT. Each PP's DIH network made of min 2/PP RTOs (many cases more!), included in regional round table (DT1. 1.3) + relevant insight during TF meetings (technical expertise) + ASPs knowledge. Plus each PP extends DIH net (AT2.1), bringing minimum 1 more RTO into network. RTOs gain cutting edge technical insights from Masterclasses (sparring PPs, especially between ASPs).
Education/training center and school	40 (3/PP + 7/LP) Education & Training Centres & Schools (ETCS) are relevant beneficiaries of SMART CIRCUIT. Each PP's DIH network made of min 2/PP ETCS, included in regional round table (DT1.1.3) + each extends DIH net (AT2.1), bringing min. 1 more ETCS to activities. ETCS gain knowledge excellence in the Circular Innovation Academy (partner to allow their professionals to join course & learn, as part of 120 extended professional CiVEs).

Target group	Specification
Enterprise, except SME	36 (3/PP) Enterprises are relevant beneficiaries of SMART CIRCUIT. Enterprises (esp. in manufacturing value-chains: construction, textile & electronics) are engaged to join pool of companies addressed in project to gain circular inspiration (1-2/PP, direct interview PPs in FACTORY DT3.2.2). Further, PPs attract min 1. more enterprise to directly attend project exchange workshops (esp. during STRATLAB & reg. round tables). More attendance likely at public conferences & BSO networks engagement, not included in the 36 count.
SME	72 (6/pp) SMEs are direct beneficiaries of SMART CIRCUIT, each PP DIH (&ASP) network can reach many more (over 300+). SMEs are engaged as pool of enterprises to take up circular value-creation opportunities (3-4/PP, direct interview in DT3.2.2, w/ selection taken forward to WP3 FACTORY TEST! Phase). Further SMEs addressed via the Service Portfolio expansion (e. g inclusion in Solution Flagships DT3.4.2), attendance at conferences (regional round table & Circular Industry Futures Series), etc.
Business support organisation	40 (3/PP + 7/LP) Business Support Organisations (BSOs) are direct beneficiaries of SMART CIRCUIT. Each PP's DIH network made-up of 1-2 BSOs to help expand benefit to wide pool of enterprises. Plus, like with RTOs & ETCSs, through DIH net expansion (DT2.1) PPs bridge to min. 1 additional BSO to expand territorial connections. BSOs gain excellent knowledge & upskilled via the CIA (pool of extended professionals in certification process) + help broker knowledge/access during Factory Pilot/Solution (WP3).
EGTC	2 EGTC are relevant beneficiaries of SMART CIRCUIT, 1 from mtSW – linking to EUCOR: Freiburg, Strasbourg & Basel – university research network & 1 from SIIT linking to Alps Mediterranean Euroregion: Provence-Alpes-Côte d' Azur; Rhône-Alpes; Liguria; Piemonte; Valle d'Aosta (especially WG on innovation & sustainability) – to be invited to transnational STRATLAB activities (AT2.3 & 2.4).

C.2.5 How does the project contribute to wider strategies and policies?

Please indicate to which strategies and policies your project will contribute and briefly describe in what way.

Strategy	Contribution
European Green Deal Strategy	SMART CIRCUIT foster a wide range of well implemented and long-term anchored activities on digital circular economy in the triple-helix scheme of the involved 28 regions in & outside CE. Main contribution for the transformation effort of EU Green Deal is set by forming a critical mass of relevant stakeholders for a consequent policy learning, training/upgrading of digital circular skills, an ongoing exploitation & further expansion of strategic flagships (e.g. on sustainable construction).

Strategy	Contribution
Territorial Agenda 2030 Strategy	The project group set a strong focus on cross-sectoral, transnational learning in the triple-helix scheme to overcome imbalances in development and growth. Furthermore, a consistent roadmap brings knowledge to action by using e.g. Horizon Europe (HE), Digital Europe Programme (DEP) and Interreg Cross-border/Transnational as well as ESIF in an aligned cross-programme manner. Lessons Learnt from implementation work will be reused in the Circular Innovation Academy to upgrade future solutions.
EU Strategy for the Danube Region Strategy	Digital circular solutions are a cross-cutting topic for the Danube Region Strategy. So, by increasing the integration & exploitation potential of synergic Smart & Sustainable Specialisation Strategies (S4), SMART CIRCUIT will give a valuable contribution to the better integration of the DR by stimulating the constructive and complementary use of regional diversity as well as help develop critical mass to tackle major common challenges (research to practice, increase number SME/LE involved).
EU Strategy for the Adriatic and Ionian Region Strategy	There is solid common ground for cooperation on digital circular economy between EUSAIR (Pillar 1, Blue Growth) and the strategic policy objectives of Central Europe. This covers for instance the brain circulation among RTO and business as well as sustainable production. SMART CIRCUIT expands the innovation benefits from wide networks and synergies, will increase cooperation & create alliances of partners (via Circular Innovation Academy, STRATLAB, joint flagships in HE and DEP).
EU Strategy for the Baltic Sea Region Strategy	The policy areas bioeconomy, innovation & education will match perfectly with the 3 solutions of SMART CIRCUIT. Also, the 1st call of the Interreg BSR is in parallel with CE and will lead to flagship projects in the priority 2.1 (improved environment & resource use / joint circular economy solutions). The project group will cooperate via an intensive exchange of knowledge generated & upgraded in the preparation phase and capitalised during the implementation (e.g. DIH Network Expanded).
EU Strategy for the Alpine Region Strategy	Due to an overlap of regions and their strategic board members (ASPs) there is already a strong cooperation via 2 governance projects (A-RING, ARDIA-Net) well connected with EUSALP working groups and policy makers and with foci on circular economy, digital transformation and aligned cross-programme cooperation. So, this solid base will get upgraded & expanded via joint trainings, policy learning and road-mapping for a future robust implementation & capitalisation scheme.
Other Strategy	SMART CIRCUIT contribute consequently to further strategies & strategic initiatives as e.g. EU CEAP (Circular Economy Action Plan), EU strategies for the 3 selected sectors (Sustainable Built Environment, Circular Electronics Initiative, Sustainable Textiles), Regional RIS3 in change to S4 (Smart & Sustainable), Digital Decades Initiative, European Industry Strategy, European Skills Agenda (strengthening sustainable competitiveness), ECCA European Circular Construction Alliance, I4MS, EFFRA.

C.2.6 How will your project make use of synergies with EU and other projects or initiatives?

Project or initiative (including funding instrument, if applicable)	Synergies foreseen
European Strategy for Data (Dataspace for Smart Circular Applications) + EU Circular Economy Stakeholder Platform addressing Horizon Europe (HE), Digital Europe Programme (DEP), concerted actions of Interreg (cross-border-cooperation (CBC), transnational) and ESIF	SMART CIRCUIT set a strong focus on digital circular innovation based on a critical mass of stakeholders (Policy, RTO, Business). Permanent screening will be carried out during the project to assure best-in-class use of lessons learnt from parallel projects & initiatives and to capitalise this synergy potential. Step by step different funds will be used to intensify implementation work among the PPs, their innovation eco system & partners of excellence from the identified good practices.
BBI JU (Bio-based Industries Joint Undertaking) + ECCA (European Circular Construction Alliance) + EU Governance of Value Chains addressing HE, DEP, ESIF, EIT (The European Institute of Innovation & Technology) and partly IPCEI (Important Projects of Common European Interest)	The SMART CIRCUIT project group work on 3 thematic sectors (construction, electronics, textiles) and 1 cross-sectoral circular technology approach. To demonstrate significance, high impact & quality of the actions set a consequent stakeholders dialogue with relevant initiatives is managed via working groups and conferences. This concerns in particular the 3 solutions (CIA, STRATLAB, FACTORY) and the correspondent digital circular value chain initiatives, all planned for a long-term use.
Network of Digital Circular Initiatives in Cross-Border-Cooperation Areas of Central Europe and strategic CBC / macro-regional / transnational Interreg partner areas addressing appropriate Interreg CBC Programmes like BAY-AT, Upper-Rhine, Euregio Maas-Rhine, BSR, NEW.	SMART CIRCUIT provides high quality results and solutions to tighten the own project innovation eco system & to set interfaces to further cooperation areas. Both supports strong results, e.g. the trainings of the Circular Innovation Academy regarding integrated experts, number of trained CiVEs. Synergies (competences, research resources) for digital circular innovation are already identified with planned projects as AI4GREEN (BAY-AT) with no overlap of PPs & some trans. Interreg (Alpine, BSR).
European Green Deal mainly addressing HE, DEP, Recovery Fund and concerted actions, aligned in a transnational context, using ESIF (e.g. Just Transition Fund)	After increasing the knowledge and working base of the SMART CIRCUIT project group is highly interested to foster direct implementation during the project and after project´s end. According to the EU Green Deal different funds are available for a long-term capitalisation of the 3 elaborated solutions. The direct use of them starts out of the project work together with identified partners of excellence as well as SMART CIRCIÙIT connect activities with complementary projects.

Project or initiative (including funding instrument, if applicable)	Synergies foreseen
eDIH (European Digital Innovation Hubs) and appropriate innovation & development corridors on upscaling knowldege for digital circular innovation using /addressing DEP, Erasmus and ESIF	All PPs of SMART CIRCUIT are (in)directly involved in/with the upcoming eDIHs where one main element will be the design and consequent use of innovation & development corridors to upgrade/upscale available knowledge for the relevant target groups and stakeholders. For instance, the CIA will get connected with complementary training providers also initiating some future strategic flagship project. Both will upgrade skills and increase number of CiVEs.
Brain Trusts and action-oriented Knowledge Communities on digital circular innovation embedded in regional & national stakeholder networks mainly using ESIF and regional / national Funds	To gain access to future trends & knowledge on top level the SMART CIRCUIT PP group cooperates with excellent ASPs (SB Strategic Board & TP Technical Panel). To demonstrate the vital network the ASP "BIZ-UP, Business Upper Austria" is highlighted. This SB member represents a network of clusters, coordinates the RIS3 (#upperVISION2030, incl. the reg. Circular Economy Strategy). So, for a professional roll-out additional funds will get used and approved projects get connected with SMART CIRCUIT.

C.2.7 How does your project build on available knowledge?

Please describe the experiences/lessons learned that your project draws on, and other available knowledge your project capitalises on. If relevant, please specify the projects to be capitalised and which project partner(s) have been involved.

SMART CIRCUIT draws on PP & ASP + network knowledge to deliver the project. Via 24 ASP (12 Strategic Board Members, from 12 external orgs linked to industrial/tech/sustainability strategy at the PPs territorial level + 12 Technical Foresight Panellist, from 9 external orgs & 3 external departments from PP orgs), the Partners draw on strategic & technical insight which enhances the network's development & operation surrounding the projects 3 key results (the CIA, STRATLAB, & FACTORY), keeping strategic dynamic + market + cutting edge research perspectives. Over 100 projects (from extended network) are drawn upon to set knowledge base (technical research & strategic, at regional & transnational level). From the PP side, they are informed by numerous Interreg specific & EU (more general) projects to formulate the base for SMART CIRCUIT. Key influences from S3HubsinCE (KPT, PBN, IWU, TECOS, HGK, FB) navigation crew on innovation in a circular economy, influences the SMART CIRCUIT network concept on connected network of DIHs for circular enhancement of the manufacturing eco-system. Further, 3DCentral (PBN, IWU, KPT) influences the training concept of Circular Value Translation Engineers (3DCentral = KITTS) + brings concept influence for the Training Hub (FB exploit knowledge & resource from parent company for specific tool's onboarding). CityCircle's Circular Hubs also find a place to be upgraded in SMART CIRCUIT (TUKE). CARE4TECH (Interreg Alpine Space, mtSW) + SMART FACTORY HUB (Interreg Danube, PBN & PRO), bring important focus on smart specialisation influence via connected PPs bridging technical & strategic work. Finally, CEUP 2030 (PRO, KPT, SIIT) brings influence/experience from the policy-learning labs, to promote knowledge exchange on advanced manufacturing which will be upgraded to the strategy-learning labs in SMART CIRCUIT, with a focus on deriving circular principle exchange to support the manufacturing eco-system.

C.3 Project partnership

What is the rationale of the partnership composition and how are partners complementary to each other? Please describe the structure of your partnership and why the involved partners are needed to implement the project and to achieve the project objectives.

SMART CIRCUIT represents all 9 Programme Countries, with (w/) 12 PPs. CE uptake of circular economy has a territorial divide & SMART CIRCUIT bridges this divide, w/ a balanced consortium of talented PPs (all experienced in EU projects & esp. INTERREG) from the full programme area. Each PP is a key player in their Digital Innovation Hub (DIH) eco-system (+European DIHs) w/ proven /strong contact to industry & policy-makers; bridging two critical environments to foster success in linking circularity w/ smart specialisation strategies. This component is critical to achieve the project goals, especially capacity enhancement towards uptake of circular policy/regulation & solutions in industry. Each PP connects to strategy expert & technical expert (2 ASPs/PP), who commit to delivering high-quality policy/market insight & cutting-edge research on Circular Industry Futures to project. 21 Master Classes (delivered by ASPs) create multi-directional knowledge transfer, show success stories across the CE territory area & build a community of common understanding. PP's experience is fostered using a matrix structure to encourage shared accountability & the best thematic development. Using Work Packages (WP) to vertically integrate thematic work & work streams (WS) for management, comms, impact & network building, to bring structural consistency & a focus on the project's objectives. Key cross-cutting WS are led by experienced KPT (LP, e.g. CEUP2030 & S3HubsinCE), PP9/PBN (WS Comms., e.g. CEUP 2030 & 3DCentral), & PP4/IWU (WS CIRCUIT NET e.g.smart3, CEUP 2030 & S3HubsinCE). WP Leaders bring cutting-edge knowledge & experience from their territories: WP1, mtSW – CAPACITIES!/CIA (e.g. CARE4TECH & klima.neutral. digital), focus on DIH capacity building support circular solution adoption; WP2, PP10/TUKE – LEVERAGE!/STRATLAB (e.g. CITYCIRCLE) focus on reducing implementation barriers via multi-stakeholder pilot system; WP3, PP8/TECOS – UPGRADE!/FACTORY (e.g.S3HubsinCE, Factory of Future SRIP), focus on upgrading value-chains towards sustainable solutions.

C.4 Project work plan

WP number	Work package name
WP1	CAPACITIES! Circular Innovation Academy to help DIHs support adoption of circular policies/solutions
WP2	LEVERAGE! Policy Learning & Strategic Engagement to Reduce Implement. Barriers & Promote Investment
WP3	UPGRADE! Enhance CE Production Value Chains w/ Digital/Technology-Driven Circular Service Solutions

C.4.1 Work package 1

Workpackage number

WP1

Work package title

CAPACITIES! Circular Innovation Academy to help DIHs support adoption of circular policies /solutions

Objectives

Please define one project specific objective that will be achieved by your project through the implementation of the work package. The specific objective should be:

- realistically achievable during the project lifetime;
- specific;
- be verifiable and measurable.

Project specific objective

To create enhanced, circular capacities across central Europe digital innovation hub (DIH) eco-systems, to better implement policies & promote an uptake of circularity in Industry through the establishment, validation & expansion of the CIA Solution.

In addition, please define one or more communication objective(s) that will contribute to the achievement of the specific objective and include reference to the relevant target group(s). Communication objectives aim at changes in a target audience's awareness and behaviour.

Communication objective(s) and target audience

Raise audience (Industry Enterprises, Policy Makers & BSO/RTO DIH Eco-Systems) awareness on available digitally/technology driven circular successes & create transnational, common perspectives /nomenclature on concepts associated to digital & technology oriented circular value-creation in industry via widespread access to learning & upskilling material created by the Technical Panel Master-classes & Circular Innovation Academy, curriculum and learning hub.

Activities

Please describe the activities foreseen in order to achieve the above project specific objective and related communication objective(s) considering also the involvement of the relevant target groups as identified in section C2.4.

Activity 1.1	
Title	SMART CIRCUIT NET - Circular - Digital Innovation

Activity 1.1	
	Hub Network Capacity Building Workstream - Focus on Expert Knowledge Gathering & Community Forming – Deliverable Responsible PP: PP4/ IWU
Start period	Period 1, 1 - 6
End period	Period 6, 31 - 36
Description	The workstream (WS) matrix for the SMART CIRCUIT NET [CIRCUIT], A.T1.1 (+ AT2.1 & AT3.1), led by PP4/IWU, give a stable cooperation-oriented support structure across full project, enhancing the specific objective of each WP. WP1 focuses on capacity building mechanism & the CIRCUIT aims to build knowledge, competencies & dialogue in the DIH's internal network + builds processes to gather experts & knowledge + success stories on digital /technology driven circular economy (& supporting policy/financing instruments) in CE, with links to EU & Global databases (Ellen Macarthur Foundation & EU Circular Economy Stakeholder Platform) to disseminate knowledge (DT1.1.2). From knowledge & expert pool, PPs build dialogue with regional stakeholders on circular industry, in periodic meetings across project (DT1.1.3). Comms WS in AT1.1: market database, infographic on success synthesis & brochure on Industrial Circular Economy + 5 regional stakeholder eco-system engagement web-based meetings.

Deliverables 1.1

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.1.1.1	SMART CIRCUIT NET – Focus on Facilitating Regional Eco-System Knowledge & Insights / PP1 /KPT	1 IT supported manual incl. guidance to develop a competency & cooperation matrix to build a base of circular success stories (120, 10/PP) & identify the multi-stakeholder regional eco-system who are interested in being inspired about digital & technology driven circularity during the project.	Period 1 , 1 - 6
D.1.1.2	Mapping circular, digital success stories in industry	1 set of 120 industry success stories (+ experts & instruments) in delivering digital/technology-focused circular economy (reg. & trans. Focus, 10/PP) saved in	Period 1 , 1 - 6

Deliverables 1.1

Deliverable Number	Deliverable title	Deliverable description	Delivery period
	+ digital database with 120 stories/ PP9/PBN	searchable database (existing EU Platform). Set base for key industry value-chains TFs (AT3.1), feeds insight for AT1.2 + industry brochure	
D.1.1.3	Regional Stakeholder Circular Industries Future Foresight Forum Report, 12 Chapters – 1/PP PP4/IWU	1 report, with summarised results of digitally /technology driven dialogue sessions (5/PP), w/ a multi-stakeholder group (min 10/meeting), used to promote exchange on developing use cases across project duration & create key linkages between actors who develop & need key circular service solutions.	Period 6 , 31 - 36

Activity 1.2

Title	BUILD! Circular Innovation Academy (CIA)'s Circular Value Engineer (CiVEs) Curriculum & Learning Hub Design & Formulation/ PP5/ mtSW
Start period	Period 1, 1 - 6
End period	Period 2, 7 - 12
Description	The CIA WP is led by PP5/mtSW. 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. In AT1.2, CIA focuses on building the 'learning by doing' approach with a modular curriculum design that has online & offline portions giving learners (future CiVEs) experience in delivering this value (D.T1.2.2). It also fosters a transnational, digital Learning Hub (utilising FB existing Moodle infrastructure, with bespoke SMART CIRCUIT section, to optimize tool re-use), which connects to global good practice & gives space for pan-EU engagement on circular challenges & opportunities related to key industry value chains (DT1.2.3). Comms WS in AT1.2: infographic on CIA (via LinkedIN & 12 PP social media channels) to raise awareness.

Deliverables 1.2

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.1.2.1	Guidance on the CIA: Curriculum design, CiVEs recruits & Learning Hub Needs Plan / PP5/mtSW	1 guidance for developing, forming & testing the CIA, incl.: cutting-edge, curriculum design principles (linked to knowledge in DT1.1.2 & TP recommendations) for industry-circular economy with online & offline 'learn-by-doing' elements & CiVEs recruitment plan & needs assessment for Learning Hub.	Period 1 , 1 - 6
D.1.2.2	Curriculum Development & Validation + Recruitment of Transnat. CiVEs Candidates PP2 /FB & PP7/COMET	One balanced curriculum (w/modules on circular production value chain technologies & technical service incl. lifecycle analysis, feasibility tools, resource audits, etc.) balanced 'learning by doing' with online & offline parts (DT2.1.2 & DT3.3.2) + recruitment document & approach for TP validation.	Period 2 , 7 - 12
D.1.2.3	Transnational Learning Hub: Tool & Methodologies for Translating Circular Value to Industry/ PP2/FB	1 online platform & user manual, linked to proven, existing learning infrastructure, to host material & masterclass seminars & support exchange between CiVEs on digitally/technologically driven circular economy in industry, aside the 4 relevant value-chain of CE (ref AT3.1 textile, elec., etc.).	Period 2 , 7 - 12

Activity 1.3

Title	TEST! The Circular Innovation Academy 'Learn-by-Doing' Pilot, Curriculum and Learning Hub Validation via CiVEs-in-Training / PP5/ mtSW
Start period	Period 2, 7 - 12
End period	Period 5, 25 - 30
Description	The CIA is led by PP5/mtSW, with FB & COMET. The CIA is the capacity building channel to promote & assist in the adoption of CE policy & solutions, in practice. In AT1.3, the CIA aims to pilot & validate the learning methodology & build a pool of 24 trained Circular Value Translation Engineers. CiVEs-in-Training complete online & offline trainings (connected to DT2.1.2 & DT3.3.2), to build their own & their DIH's capabilities to deliver digital /technology-driven circular services with a transnational support-network to exchange

Activity 1.3	
	knowledge & experience. Modules (designed in AT1. 2) includes circular value-chain components & production value-chain foci (validated & supported by TP insights + value-chain TF - AT3.1). PPs start building expanded pool of CiVEs through communication activities. Comms WS in AT1.3: marketing/press release on Learning Hub, inviting wider pool of trainees to join, w/press-media partnerships in local language + marketing campaign on trained CiVEs + trainee vlogs.

Deliverables 1.3

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.1.3.1	Guidance on Validating the CIA Curriculum & Learning Hub, Learn by Doing Pilot / PP5/mtSW	1 guidance on implementing the CIA Pilot & validating the Learning Hub & Curriculum, including key performance indicators, structure of regular community check-ins, feedback templates & pathways for CiVEs-in-training to become certified in the common methodology.	Period 2 , 7 - 12
D.1.3.2	Pool of Trained CiVEs, Online & In-Person Training for 24 CiVEs in Training PP7/COMET	1 report on 24 (2/PP) CiVEs-in-Training (+connections to additional DIHs) complete CIA Curriculum via Learning Hub, & embed learnings in practice via A.T3.3 Pilots. The CIRCUIT gains critical digital & technology driven circular-value chain innovative service solutions knowledge & experience.	Period 4 , 19 - 24
D.1.3.3	Validation Report on Functioning of the Learning Hub & Curriculum / PP2/FB	1 technical report fed by stakeholder testing community (CiVEs & PP & TP & expanded DIH networks) on functionality, 'fit-for-purpose' character of Platform & Circular Learning Material, promotes upgrade round using lessons-learnt before expansion of CiVEs-base. Completes O1.2.	Period 5 , 25 - 30

Activity 1.4	
Title	EXPAND! Establish the CIA's Permanent Role as Sustainable Support Structure for Enhancing CE Capacities (Professional Upskilling) to Engage with Circular Economy Opportunities / PP5/ mtSW
Start period	Period 5, 25 - 30
End period	Period 6, 31 - 36

Activity 1.4

Description	The CIA in A.T1.4 continues to be led by PP5/mtSW. The CIA aims to foster a long-term solution for training & upskilling of professionals (across multiple stakeholder-groups) towards a common nomenclatures & framework for the delivery & support of digitally & technology driven circular economy service solutions & expanding the pool of CiVEs-in-Training taking the CIA programme, including industry stakeholders, with permanent benchmarking & links established to EU/Global Initiatives (Ellen MacArthur, EU Stakeholder Platform & Dataspace for Smart Circular Applications, EIT Climate). A lasting model is incorporated (DT1.4.2) (own legal form / adopted by CIRCUIT member) with upgrades made according to trainee feedback & benchmarking. Further, the CiVEs pool is expanded to 120+ (recruitment 10/PP) additional participants registered for training. Comms WS in AT1.4: output factsheets with key lessons infographics + webinar with feedback from previous students + comms on permanent CIA opening.

Deliverables 1.4

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.1.4.1	Guidance on the CIA Solution Expansion Model & Transnational Recruitment Strategy / PP5 /mtSW	1 guidance on lasting circular innovation academy solution, discussion & legal processes to analyse the market need for establishment form & instructions on CiVEs recruitment expansion + webinar to market experience of pilot-trainees & ongoing curriculum benchmarking work with external TP ASPs.	Period 5 , 25 - 30
D.1.4.2	Lasting Model for CIA Expansion & Future Use, Legal Form or Adoption Concept / PP2/FB	1 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 & circular learning material upgrade & streamlining for wide-spread use. LoCs secured for sustainability. Delivers O1.3.	Period 6 , 31 - 36
D.1.4.3	Pool of Trained CiVEs Expanded, Recruitment of 120 New CiVEs-in-Training PP7 /COMET	1 report on 120 (10/PP) newly recruited CiVEs-in-Training, registered & strong start to use the platform, & matrix connections to expanded CIRCUIT DIH contacts (Pan-EU focus to trainee base) + a description of the lessons & results of the CiVEs webinar.	Period 6 , 31 - 36

Activity 1.5	
Title	Impact Controlling (IC) Workstream – Spotlight on the Circular Innovation Academy: Capacity Building Relevance Assessed via Lessons Learnt & Future Foresight / PP9/ PBN
Start period	Period 1, 1 - 6
End period	Period 6, 31 - 36
Description	The WS matrix for the IC in A.T1.5 (+ AT2.5 & AT3. 5), is led by PP9/PBN & gives consistent focus on result quality, benchmarking & dissemination at every stage of the project. The IC WS aims to analyse the consortium's capability at addressing the WP's specific objective + promoting the widespread dissemination of results (via 7 sitting of the Strategic Dissemination Board-SB-in Lab DT1. 5.3) & benchmarking CIRCUIT activities to cutting edge research & market activities championed in 7 sittings of the Technical Foresight Panel – TP, DT1. 5.3. In AT1.5 IC WS gathers input from SB & TP & feeds improvements into the CIA & extending the user-group of the solution, linked to regular meetings of the consortium (online & physical outreach). Comms WS AT1.5: consolidated results infographic for LinkedIn + 2 x press release on CIA with Press Media Partnerships (1/PP, 24 total, release in English & 9 countries local language). Circular Industry Futures Master Classes (9, 3xPP meetings-see C7).

Deliverables 1.5

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.1.5.1	Impact Controlling Guidelines, Rules of Procedure for SB & TP in Project & CIA Review / PP9 /PBN	1 IT-guidance on IC rules, roles, responsibilities & reporting procedures of SB & TP to promote legitimacy & relevance of work, using lessons learnt & future foresight. WP1 focus on CIA's relevance for enhancing circular capacities in a transnational context, in BUILD, TEST & EXPAND stage.	Period 1 , 1 - 6
D.1.5.2	Strategic Dissemination Labs (SDLs) & Impact Reports /	7 Strategic Dissemination Labs (SDLs, linked to A2.5 & A3.5) present results of CIA to SB. 1st meeting as Kick-Off & sets role of SB. 2-6 provide direct results update on CIA & promote feedback from project strategic	Period 6 , 31 - 36

Deliverables 1.5

Deliverable Number	Deliverable title	Deliverable description	Delivery period
	PP9/PBN (Prep /Mod) & PP11 /INTEMAC (Report)	ASPs (all 12 PPs paired with reg. ASP for promoting wide roll-out & result use).	
D.1.5.3	Tech. Foresight Expert Panel on CIA & Circular Industry Future Masterclass PP1-KPT/PP2-FB/PP5-mtSW	7 Meetings of the TP (See C7 for location), digital & physical participation, to gain feedback on technical development of the CIA. Also, 9 Circular Industry Masterclasses (30min-1hr each) to enhance CIA learning & promote knowledge exchange at meeting in M1/KPT, M7/FB & M13/mtSW.	Period 6 , 31 - 36

Outputs

Please define the outputs which will be realised through the activities foreseen in this work package and link them to the related programme output indicators.

Output number 1.1

Output title	The SMART CIRCUIT NET: the digital & technology-driven transnat., Circular Digital Innovation Hub Network [CIRCUIT] w/ 4 Strategic Task Forces (TFs) & regional outreach (Work Stream [WS] Lead: IWU)
Programme output indicator	RCO87_2.3: Organisations cooperating across borders
Measurement unit	organisations
Output target value	33.00
Delivery period	Period 1, 1 - 6
Output description	The CIRCUIT (AT1.1, AT2.1 & AT3.1) is a digital & technology network to advance the uptake of CircEc in CE manufacturing eco-system. The CIRCUIT = 12 reg. DIH Eco-Systems PP orgs, split to 4 TFs, + stakeholders & experts (e.g. 21 external ASPs + 3 int. experts) + aligned w/EU CEAP, based on CE-relevant VCs. It fosters & improves access to knowledge & solutions, through exchange & joint-planning of actions to bridge territory, policy & industry gaps. Delivered w/ signed CA & MoU in D.2.1.3.

Output number 1.2

Output title	The Circular Innovation Academy (CIA) Pilot: "Learning by Doing" - Transnational Trainees Take &

Output number 1.2	
	Validate Learning Process (WP Lead: PP5/mtSW)
Programme output indicator	RCO84_2.3: Pilot actions developed jointly and implemented in projects
Measurement unit	pilot actions
Output target value	1.00
Delivery period	Period 5, 25 - 30
Output description	The CIA Pilot 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.
Output number 1.3	
Output title	The Circular Innovation Academy (CIA) Solution: Circular Industry Futures, Long-Term Training & Upskilling Platform (WP Lead: PP5/mtSW)
Programme output indicator	RCO116_2.3: Jointly developed solutions
Measurement unit	solutions
Output target value	1.00
Delivery period	Period 6, 31 - 36
Output description	A lasting model for the CIA (AT1.4), 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. Permanent 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).

Investments

C.4.1 Work package 2

Workpackage number

WP2

Work package title

LEVERAGE! Policy Learning & Strategic Engagement to Reduce Implement. Barriers & Promote Investment

Objectives

Please define one project specific objective that will be achieved by your project through the implementation of the work package. The specific objective should be:

- realistically achievable during the project lifetime;
- specific;
- be verifiable and measurable.

Project specific objective

To develop, test & expand a permanent transnational policy/strategy solution in the Strategy Lab (STRATLAB), to reduce implementation barriers & help diverse TGs leverage access (processes & finance) to innovative circular solutions & services.

In addition, please define one or more communication objective(s) that will contribute to the achievement of the specific objective and include reference to the relevant target group(s). Communication objectives aim at changes in a target audience's awareness and behaviour.

Communication objective(s) and target audience

Change audience (Industry Enterprises, Policy Makers & DIH Eco-Systems) perception on barriers, challenges & roles associated to delivering digitally/technology driven circular economy solutions, through sharing multiple experiences from policy to enterprises. Video shorts, infographics & press-releases allow multi-channel penetration (YouTube, LinkedIn & press partnerships). Promote widespread dissemination via press partnerships, SDL & TP + expand STRATLAB to other territories.

Activities

Please describe the activities foreseen in order to achieve the above project specific objective and related communication objective(s) considering also the involvement of the relevant target groups as identified in section C2.4.

Activity 2.1	
Title	SMART CIRCUIT NET - Circular – DIH Network

Activity 2.1	
	Capacity Building WS -Focus on Mobility Missions + Circular Innovation & Development Corridors (CIDCs) Building for Enhanced Strategic Exchange/ PP4/ IWU
Start period	Period 1, 1 - 6
End period	Period 6, 31 - 36
Description	The CIRCUIT (led by PP4/IWU) in WP2 aims to enhance the exchange between DIH eco-systems to build the trust & understanding needed to develop transnational CIDCs & bring outside policy/strategy learning. 12 Transnational Mobility Missions (12 transnational events, 1/PP, min 1 other PP joins & brings regional stakeholders) allows each DIH to showcase circular-industry eco-system & highlight regional success stories & needs & build cohesion + the digital/tech services/support provided to enterprises. PPs attend visits, CiVEs vlogs their experience. Next, PPs present & connect externally to other DIHs (3/PP + form strategic bond w/ 1 additional DIH). The 28 connected DIHs sign a Memorandum of Understanding (MoU, DT3.1.3) to establish collaboration in the CIDCs (also WP3), the DIHs come from CE & EU (4 Macro-Regional Territories). Comms AT2.1: infographic on results of study-visits, incl. orgs & tech showcases (DT2.1.2) + CiVEs vlogs + PP @ external events (3x/PP – 36 total).

Deliverables 2.1

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.2.1.1	Transnational Mobility Missions & Circular Innovation & Dev. Corridor (CIDC) Guidance / PP4 /IWU	1 IT supported guidance on hosting & attending transnational mobility missions between connected DIHs (scope & aligned focus & stakeholders to include, policy & industry pool + success story experts & companies from DT112) + guidance on meeting & discussions for CIDC Memorandum of Understanding	Period 1 , 1 - 6
D.2.1.2	Transnational Mobility Missions, 12 Digital & Circular	1 Report on the 12 Study Visits to regional digital & circular regional DIH eco-system. Promotes hands on Learn-by-Seeing (& part of CIA – AT1.3) to meet & exchange with other DIHs on circular industry futures +	Period 5 , 25 - 30

Deliverables 2.1

Deliverable Number	Deliverable title	Deliverable description	Delivery period
	Regional Eco-Systems Visits/ PP6/SIIT	see success stories/challenges in practice + bring multi-stakeholders to join.	
D.2.1.3	Circular Industries Future 2030 Expansion Road Map & MoU w/ 16 Additional DIHs / PP1/KPT	1 Roadmap, incl. strategy & action plan, links D2.4.3 & D3. 4.2 results w/ expansion plan for the circular innovation & development corridors + signed MoU w/ 16 Additional DIHs in CE & EU strategic territories. New signed & PPs uptake roadmap with key link to eDIHs & EU CEAP strategy. Completes 2.3.	Period 6 , 31 - 36

Activity 2.2

Title	BUILD! Establish Policy Maker Outreach, STRATLAB Concept & Complete Strategy Benchmarking to Establish Transnational Opportunities / PP10/ TUKE
Start period	Period 1, 1 - 6
End period	Period 2, 7 - 12
Description	The STRATLAB thematic development is led by PP10 /TUKE. The STRATLAB aims to create multi-directional dialogue between DIHs + manufacturing enterprises + policy makers, to reduce implementation barriers & leverage opportunities for public & private investment to advance circular uptake in industry. In AT2.2, The STRATLAB focuses on starting policy-maker outreach (DT1.3.2) & territorial strategy & instrument benchmarking (DT1. 3.3). 36 Interviews (3/PP) with local, regional, national policy-stakeholders builds understanding about regulatory/legislative roll-out challenges & promotes exchange & spotlight on different territorial considerations for support instruments for circular industry futures. 9 CE-Countries + 12 regional overview chapters on industrial circular economy approaches/strategy & instruments, w/ transnational opportunities & links to thematic action planning in AT3.2.3. Comms WS AT2.2: 36 policy-interview videos + 1 synopsis montage video + Strategy infographic.

Deliverables 2.2

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.2.2.1	Policy Maker Outreach & Strategy Benchmarking Planning Matrix & Guidance Paper / PP1/KPT	1 planning guidance providing implementation steps to engage policy-makers in interview series (incl. interview guide – 3/PP-36 total) + transnat. panel (KoM) + process for territory (national/regional) strategy benchmarking/instrument (policy/finance) analysis to promote uptake of circularity.	Period 1 , 1 - 6
D.2.2.2	Policy-Interview Series on Impressions & Considerations of Circular Industry Futures / PP7/ COMET	1 IT-based report summarizing results of policy maker interviews (3/PP, 36 total) + transnat. panel (KoM) w/ LPA, RPA & NPA, to discuss needs & challenges of key manufacturing VCs + strategic considerations about CircEc opportunities in industry (digitally & tech. driven) + future policy options.	Period 2 , 7 - 12
D.2.2.3	Territorial Strategy & Instrument Benchmarking Fact Sheets on Circular Industry Futures/PP10 /TUKE	1 IT-based report, containing 9 national, and 12 regional strategy & instrument factsheets on the circular/digital /technology divide in territory (current status & future outlook) & analysis of transnational strategic options for key CE value-chains (DT3.1.2 connection).	Period 2 , 7 - 12

Activity 2.3

Title	TEST! Establish the Strategy Learning Lab [STRATLAB] "Exchange & Leverage" Pilots to Support Policy Maker's Multi-Lateral Engagement on Circular Industry Challenges & Needs / PP10/ TUKE
Start period	Period 2, 7 - 12
End period	Period 5, 25 - 30
Description	The STRATLAB promotes an exchange of information to broker mutual understanding & collective approaches to reduce implementation barriers & leverage investment in circular solutions. In AT2.3, STRATLAB focuses on design & implementing the STRATLAB Pilot. Builds on knowledge from complementary projects (CEUP 2030, S3HubsinCE, City Circle) & Interviews in AT2.2,

Activity 2.3	
	the PPs bring triple-helix stakeholders together (policy, business, RTOs & BSOs) via DIH eco-system into 12 reg. strategy-learning labs (SLLs) & 1 trans. lab. The Lab build connections & trust between stakeholders, & most importantly show policy-makers success stories (methods & instruments) from other territories, to promote implementation & leverage of investment for circular solutions in manufacturing value-chains. Dialogue brokered from on collective accountability for circular industry future strategy. Comms in AT2.3: infographics & output factsheet on SLL lessons, disseminate on website, LinkedIN & all PP comms channels.

Deliverables 2.3

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.2.3.1	STRATLAB Pilot Design Guidance for Circular Industry Futures Exchange / PP3 /PRO	1 planning guidance, builds on AT2.2, to deliver 12 regional labs (& 1 joint trans. Lab), focused dialogue on how to support digital & technology-driven circular economy in CE manufacturing via success stories & instrument exchange from enterprises within & policy makers outside the territory.	Period 3 , 13 - 18
D.2.3.2	12 Regional Strategy Learning Lab Pilots, to bridge industry & policy orgs & strategy / PP12 /HGK	12 SLLs, w/ min 10 regional/national stakeholders/PP involved + outside perspectives (video + online participation), to bring insight from inside & outside territory. Enlarging outreach & bridging experience. Focus topics on: circular opportunities & support instruments, collective accountability	Period 4 , 19 - 24
D.2.3.3	Transnational Policy-Learnings Report & Circular Industries Futures Panel /PP10/TUKE	1 report & infographic with policy learning method key lessons to take to transnational environment. PP's SB & policy-making partners take part in transnational panel to disseminate results & promote transnational cross-territory lessons, in cooperation w/ HU EU Presidency in 2024. Delivers O2.1.	Period 5 , 25 - 30

Activity 2.4	
Title	EXPAND! Transnational Circular Industry Futures Strategy Lab Solution: Roll-Out to Implement Circular Policies & Bridge Territory/Strategy Gaps through Smart Specialisation Synergies / PP10/ TUKE

Activity 2.4	
Start period	Period 4, 19 - 24
End period	Period 6, 31 - 36
Description	In AT2.4, STRATLAB focuses on expanding lessons from the pilot (2.3) to a permanent regional (w/ transnational impulses) multi-directional method to discuss mechanisms to reduce implementation barriers & promote alignment/synergy growth during the leveraging of private & public investment to adopt circularity into CE manufacturing eco-system. PPs establish & deliver first (DT2.4.2) Circular Industry Future Strategy Lab Solution (12 regional Labs & 1 trans Lab to promote cross territory learning), upgraded from AT2.3, as a permanent dialogue space to bridge Circular to RIS3 strategies (in cooperation w/ ASPs) & promote optimal integration of EU industrial & digital strategies + CEAP into reg. eco-system. In DT2.4.3 PPs build strategic regional & transnational territorial recommendations + DIH-ecosystem role in the policy-bridge brokering system. Comms WS AT3.3: public event to join reg. STRATLAB (virtual town-hall) + output factsheet on STRATLAB, disseminate via project channels.

Deliverables 2.4

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.2.4.1	STRATLAB Solution & Strategic Recommendation Processes & Guidance (Reg. & Trans.) / PP10 /TUKE	1 planning guidance, built on results of AT2.2 & AT2.3, to deliver 12 reg. STRATLABs (1 trans. solution & Lab), focused permanent dialogue brokering in DIH eco-system, of multi-stakeholders needed to leverage finance & reduce barriers to accessing digital/tech drive circularity.	Period 4 , 19 - 24
D.2.4.2	12 Reg. STRATLABs & 1 Trans. Panel to Bridge RIS3 & EU Strategies & Circular Action Plan / PP12/HGK	Starting implementation of 1 Transnational Solution (12 Regional STRATLABs, w/ min 20 regional/national stakeholders/PP involved + 1 transnational Panel (M36 / in Croatia)) to develop key bridging recommendations & promote discussion/exchange on policy instruments & lessons learnt across project.	Period 6 , 31 - 36
D.2.4.3	Strategic Recomm	1 report w/ strategic recommendations (linked to DT2.	Period 6

Deliverables 2.4

Deliverable Number	Deliverable title	Deliverable description	Delivery period
	endations to Support Reg. Policy Scale Up & Transnational Synergies /PP3&6 PRO&SIIT	1.3) to support RIS3 scale up for a Circular Focus (& link to EU Industry & Digital Strategies), with feedback loops from policy-makers (interview pool from DT3.1.2) & ASPs, rooted in the CIRCUIT (DIH eco-system) brokerage + LOCs. Completes O2.2.	, 31 - 36

Activity 2.5

Title	IC Workstream – Spotlight on the Circular Industry Futures Strategy Lab, methodological impact at reducing barriers & leveraging investment in Industry / PP9/ PBN
Start period	Period 1, 1 - 6
End period	Period 6, 31 - 36
Description	The IC WS in WP2 continues to be led by PP9/PBN & analyses the consortium's capability at addressing the WP's specific objective & pilot/solution (i.e. reducing barriers & leveraging investment via the STRATLAB), through the feedback gained during meetings of the SB (D.T2.5.2) & TP (DT2.5.3) & feeds improvements into STRATLAB, whilst extending the user-group of results. In AT2.5, IC builds on WP1, aims to assess the appropriateness /methodological relevance of the STRATLAB & assures the strategic relevance of the results for the multi-stakeholder community. Comms WS AT2.5: consolidated results infographic for LinkedIn + press release on STRATLAB (w/press partnership - 12 total, release in English & 9 countries local language). Public webinars & regional town-halls on key results + Circular Industry Futures Master Classes (6, 2 x PP meetings-see C7: SIIT, Genoa, M19 & PBN, Hungary, M25 w/ Hungarian EU Presidency), uploaded after to YouTube.

Deliverables 2.5

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.2.5.1	IC Guidance to Establish Protocol for Assessing STRATLAB & Circular Futures Strategy / PP9 /PBN	1 guidance, building on DT1.5.1 Rules of Procedure for SB & TP, establishing analysis & feedback mechanism & performance indicators for the STRATLAB Pilot/Solution & Circular Futures Strategy, linked to PP meetings (7 meetings, see C7). Board Pack Instructions & Expected Infographics & Results List.	Period 1 , 1 - 6
D.2.5.2	SDLs & Impact Reports for STRATLAB & Strategy / PP9 /PBN (Prep/Mod) & PP11/INTEMAC (Report)	7 Strategic Dissemination Labs (SDLs) present results of STRATLAB to SB (with Board Comms pack). Provide direct results update & gains feedback from project ASP SB on STRATLAB & Circular Industry Strategy & promotes wider dissemination via SB members to build wider-uptake & use of results.	Period 6 , 31 - 36
D.2.5.3	Technical Foresight Expert Panel on STRATLAB & Circular Industry Masterclass PP6 /SIIT & PP9/PBN	7 Meetings of the TP, digital & physical, to gain feedback on technical development of the STRATLAB & Circular Industry Future Strategy + 6 Circular Industry Masterclasses (30min-1hr) to enhance understanding about multi-stakeholder views on Circular Industry Futures at M19, Genoa & M25, Hungary.	Period 6 , 31 - 36

Outputs

Please define the outputs which will be realised through the activities foreseen in this work package and link them to the related programme output indicators.

Output number 2.1

Output title	The Strategy Learning Lab (STRATLAB) "Exchange & Leverage" Pilot, 1 Trans System (12 Units) Implemented to help Policy-Makers Understand Circular Industry Opportunities & Hear TG Needs (WPL: TUKE)
Programme output indicator	RCO84_2.3: Pilot actions developed jointly and implemented in projects
Measurement unit	pilot actions
Output target value	1.00
Delivery period	Period 5, 25 - 30
Output description	A joint pilot system/methodology of policy-learning

Output number 2.1	
	labs, w/ 12 reg. & 1 transnat. units (1/PP per region + one joint session), to test & build a multi-directional dialogue space for policy makers to learn about other territorial developments on policy instruments & hear from enterprises about struggles /visions w/ adoption digital/technology drive circularity into their production value-chains. Using dialogue bridge policy & industry + to overcome reg /legislative challenges. Delivered w/ D2.3.3.
Output number 2.2	
Output title	The Circular Industry Futures Strategy Lab Solution: Policy-Industry Brokerage for Long-Term Engagement on Bridging Territory & Strategy Gaps (WP Lead: TUKE)
Programme output indicator	RCO116_2.3: Jointly developed solutions
Measurement unit	solutions
Output target value	1.00
Delivery period	Period 6, 31 - 36
Output description	A transnational solution method for policy-industry engagement, via the Circular & RIS3 Strategy Lab, to build ongoing engagement b/w triple-helix stakeholders on roles, accountability & support required to reduce barriers & build sustainable financing (public & private) to uptake digital & tech-driven solutions in industry. It links other territorial strategies & promotes sustainable, cross-territory exchange on policy-instruments (finance /cooperation). Delivered w/ D2.4.3. (LoC & Solution).
Output number 2.3	
Output title	CENTRAL EUROPE CIRCULAR INDUSTRY FUTURES 2030: Transnational Strategic Roadmap & Action Plans for Sustainable Roll-out of Service Solutions & DIH Brokerage (WP Lead: PP10/TUKE & LP: KPT)
Programme output indicator	RCO83_2.3: Strategies and action plans jointly developed
Measurement unit	strategy/action plan
Output target value	1.00
Delivery period	Period 6, 31 - 36

Output number 2.3	
Output description	The CE Circular Industry Futures 2030 strategy & action plan, gives strategic recommendations & action areas for involved territories (9 nations & 12 regions) + trans. model for strategic & synergetic integration & ongoing engagement delivery of service solutions, via DIH-facilitated / brokered systems, includes MoU w/ expanded network 28 total DIHs & builds on pilot planning & TF engagement (WP3), bridges gaps in Green Deal, EU CEAP, Industrial Agenda, DEP to RIS3. Delivered with D2.1.3.

Investments

C.4.1 Work package 3

Workpackage number

WP3

Work package title

UPGRADE! Enhance CE Production Value Chains w/ Digital/Technology-Driven Circular Service Solutions

Objectives

Please define one project specific objective that will be achieved by your project through the implementation of the work package. The specific objective should be:

- realistically achievable during the project lifetime;
- specific;
- be verifiable and measurable.

Project specific objective

To design, pilot & roll-out service-solutions (1 system, 4 DIH Solution Portfolios) to the CE Manufacturing Eco-System, to create shared value & permanently upgrade CE production value-chains w/ digital/tech driven circular economy services & support

In addition, please define one or more communication objective(s) that will contribute to the achievement of the specific objective and include reference to the relevant target group(s). Communication objectives aim at changes in a target audience's awareness and behaviour.

Communication objective(s) and target audience

Change TG's (Enterprise specific) behaviour related to accessing, providing & supporting digital/tech-driven circular service. Rolling-out methodologies to create shared value for organisations, society & the environment + clear paths for use. Video shorts, infographics & press-releases on sustainable solution flagships extends stakeholder impact via project's media channels. Plus, Flagship projects connect PPs to other DIHs & wider pool of TGs to access service solutions sustainably.

Activities

Please describe the activities foreseen in order to achieve the above project specific objective and related communication objective(s) considering also the involvement of the relevant target groups as identified in section C2.4.

Activity 3.1	
Title	SMART CIRCUIT NET - Circular - Digital Innovation

Activity 3.1	
	Hub Network Capacity Building Workstream - Focus on the Lasting Cooperation Network & Service Solution Portfolios/ PP4/ IWU
Start period	Period 1, 1 - 6
End period	Period 6, 31 - 36
Description	In WP3 the CIRCUIT creates a strong industry-strategy to connect players in transnationally aligned & thematically relevant fields, interlinked in operation to deliver 4 strategic Service Portfolios, connected to next phase projects, building out work to 2030. At the outset, DT3.1.2, PPs grow 4 strategic Task Forces (TF) (4PPs/TF & 1 mandatory TF) to establish the CIDCs. All PPs in 1 TF on cross-sectoral services in the circular value-chain. Each TF meets regularly in project (virtually) to build consensus on the service/solution mix of the CIDCs: circular value-chain (i.e. upstream vs downstream support, technical/process design vs. data intelligence vs. end-of-life processes), for the specified sectors. Portfolios (DT3.1.3) create lasting support to multi-stakeholder needs in the uptake & adoption of digital & technology-driven circular economy principles. Comms WS AT3.1: marketing of 4 Portfolios links to DT3.4.2, on project channels (website, LinkedIn & PPs).

Deliverables 3.1

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.3.1.1	Guidance on Forming TFs on CIDCs + Service Portfolio Development & Alignment / PP4 /IWU	1 guidance document on forming the TFs (leader & core members, 4PPs/TF, all 12 in cross-sector TF) + process reporting steps for developing trans. aligned 4 Service Portfolios, incl. meeting obligations of the TFs & aligning work to offer complementary services in pilots & solutions (AT3.2 & 3).	Period 1 , 1 - 6
D.3.1.2	CIRCUIT Strategic Task Force Meetings on CIDC & Common Service Portfolios / PP1 /KPT	4 short reports (1/Period) on TF, strategic & service catalogue/portfolio generation co-creation discussions, incl. categorization & insights on TF's CIDC transnational technical considerations about relevant value-chain & digitally & technology-driven circular value-added services, pre-costing.	Period 4 , 19 - 24

Deliverables 3.1

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.3.1.3	Report on the 4 CE Value-Chain Transnational Service Portfolios PP1 /KPT	1 Report, consisting of 4 CE value-chain relevant, transnationally considered & costed service portfolios to optimise the access & availability of digital/technology-driven circular services to industry (design, optimisation, end-of-life, across numerous tech areas linked to DT3.4.2 outcomes).	Period 6 , 31 - 36

Activity 3.2

Title	BUILD! Understanding the Needs & Challenges of Industry Eco-System in 4 Production Value-Chains, to Build Strategic Clusters & Action Plans for Transnational Pilot & Solution/ PP8/ TECOS
Start period	Period 1, 1 - 6
End period	Period 2, 7 - 12
Description	WP3 is led by PP8/TECOS & aims to build, test, implement & expand long-term sustainable systems to upgrade CE production chains by enabling enterprises to 'feel & touch' the benefits of digital /technology-driven circular economy services & experiment with innovation within circularity to add value, achieve aims & overcome functional challenges. AT3.2, sets a capacity baseline & engagement pool with 60 enterprises (5/PP) from the CE manufacturing value-chains. This pool is interviewed (w/baseline audit) on challenges, needs & perceptions re: circular economy & industry future (DT3.2.2). Circular capacity of enterprises is measured. Outcomes are mapped to establish circular service clusters, informing the transnational pilot & solutions. Led by 4 TFs (AT3.1), Action Plans are formed, as a strategic planning activity for the pilot activities in AT3.3 & linked to AT1.1 insights. Comms WS AT3.2: 60 videos w/ enterprises + 4 synopsis video & infographics to show synthesis per TF value chain.

Deliverables 3.2

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.3.2.1	Industry Interviews /Audits & Action Planning Guidance for Circular Pilot Factory / PP8 /TECOS	1 interview guide & implementation paper to address 60 (5/PP) enterprises to gain cross- CE manufacturing value-chain perspectives on needs, challenges & interests on digital/technology driven circular economy, w/ mapping & action planning rules to guide starting phase of pilot factory development.	Period 1 , 1 - 6
D.3.2.2	Industry Interview /Audit Series + Mapping on Needs, Challenges & Interests / PP3/ PRO	1 report on outcomes of 60 (5 /PP, 60 Total) Interviews. Spotlight on the challenges/needs of industry (technical, regulatory, financial, etc) + analysis & mapping of outcomes to develop circular innovation solution/service profiles for the CIRCUIT TFs. Sets baseline for circular value-add themes.	Period 2 , 7 - 12
D.3.2.3	Industry Action Plans, to Address Needs & Demonstrate Digital-Circular Technical Value-Add /PP6/SIIT	1 IT-based action plan to address needs & match successes to support CE industry increase capacity to access circular services + linked to strategic benchmarking (AT2.2), setting up operational scope & plan of the Pilot Factory (AT3.3) + connection to the CIRCUIT's TFs, Service Portfolio Actions.	Period 2 , 7 - 12

Activity 3.3

Title	TEST! The Circular Industry Future Factory (The FACTORY) "See & Feel" Pilot Implementation to Improve Industry Access to Digital/Technology-Driven Circularity / PP8/ TECOS
Start period	Period 2, 7 - 12
End period	Period 5, 25 - 30
Description	The Factory helps industry 'see & feel' the opportunity of digital/tech-driven circularity. In A3.3 the PPs put A3.2 plan into action & champion 1 transnational system of 4 jointly designed & tested pilots to promote uptake of circularity in production chains (PPs work in 2 test pilots, 1 mandatory for all & 1 chosen sectors). Pilots upgrade classic DIH services (training, test-before-invest, technology feasibility) & promote transfer of knowledge & technology between territories & give technical

Activity 3.3	
	support to specific circular value-chain value-creation actions (human-machine interaction, smart materials, digital twins, data-driven systems, & AI, etc.for: design/business model upgrades, process &sourcing optimization/smart operations, reduction of resource use + end-of-life support, reduce /repurpose, remanufacture, reuse, recycle) & apply actions in 3 sectors (construction, text., & elect.). Comms AT3.3: 12 digital compilation to showcase the Factory + output factsheet & infographics.

Deliverables 3.3

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.3.3.1	Circular Industry Futures Pilot Factory Design & Implementation Guideline / PP8 /TECOS	1 guidance document, building on D.T3.2.3 Plan & linked to CIA Curriculum, with regular reporting & benchmarking to CIRCUIT TFs & CiVEs to share lessons & build transnational service offering. Engage pool of industries on digital/technology driven opportunities across CE production value-chains.	Period 2 , 7 - 12
D.3.3.2	Circular Industry Pilot Factory Implementation Interim Report / PP6/ SIIT	1 report on interim outcomes of the 4 transnational pilots (industry value creation = revenue increase & cost reduction, etc.) + transnational observations (supported by SB/TP feedback in M19 conference) + expanding discussion on long-term solutions & extending benefits to wider pool of industries.	Period 4 , 19 - 24
D.3.3.3	Circular Industry Pilot Final Report, Digital Report & Marketing Campaign on Pilot Stories /PP9 /PBN	1 digital report & marketing campaign on transnat. system of industry pilots. 4 spotlights & 1 transnational synopses on lessons learnt & benefit gained from baseline. Showcase enterprises & DIHs, strategic/policy support, tangible results & next step planning to expand benefits. Completes O3.1.	Period 5 , 25 - 30

Activity 3.4	
Title	EXPAND! Circular Industry Factory Futures Solutions to Upgrade Production Chains & Capitalize Benefits in Central Europe / PP8/ TECOS
Start period	Period 4, 19 - 24
End period	Period 6, 31 - 36

Activity 3.4

Description	In AT3.4, The PPs use lessons & tangible outcomes of 4 transnational Pilot tests (DT3.3.1&2) + creates 1 Transnational Flagship Solution for delivering sustainable support to Industry & promoting widespread dissemination & capitalisation of services towards long-term upgrade of CE manufacturing value-chains. Derived from TF's aligned Service Portfolios, the PPs create 4 common, transnat. Flagship Projects (1/TF, 2/ PP, all in the cross-sectoral Flagship, & PPs divide in 3 sectoral ones), to leverage finance & create operational framework for delivery of the digital /technology driven circular solution (DT3.4.2), using HE, DEP & other ERDF programs + delivered in cooperation w/ additional territories via MOU DIHs (DT2.1.3). A wide-spread marketing campaign for the Transnational Solution, to ensure access knowledge & opportunity for support is extensive, DT3.4.3. Additional Comms WS AT3.4: Solution Press Release (English & local language) + marketing brochure (AT3.1), + Output Factsheet.

Deliverables 3.4

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.3.4.1	Circular Industry Factory Flagship Solution Guidance / PP8/TECOS	1 guidance document, building on DT3.2 & 3.3 lessons & tangible benefits, + TP & stakeholder feedback & extended network development of Service Portfolios (AT3.1), on the technical requirements & partnership & submission requirements on the Transnational Flagship Solution Showcase (1/ TF, 4 Total).	Period 5 , 25 - 30
D.3.4.2	1 Design Report on Transnational Solution for The Factory, w/4 Flagship Solution Models / PP2/ FB	1 report on the Transnat. Solution, w/ evidenced next steps to promote Solution Implementation (1/Task Force), submitted/signed LOC + next steps bringing Flagship Solution Model to the market, to promote system-wide VC production upgrades toward more sustainable operation. Completes O3.2.	Period 6 , 31 - 36
D.3.4.3	Digital Marketing Campaign for Flagship Service Solutions (1 Transnational System, 4 Units) /PP9/PBN	1 digital marketing campaign on system of industry solutions. 4 spotlights & 1 transnational synopses on value-creation embedded in the 4 Portfolios & showing opportunities to change wider behaviour & adoption of circularity in production value-chains across the CE/EU through Flagship Models.	Period 6 , 31 - 36

Activity 3.5

Title	IC Workstream - Focus on Long-Term Sustainability & Widespread Circulation of Circular Industry Future Factory Solution, via Lessons Learnt and Future Foresight / PP9/ PBN
Start period	Period 1, 1 - 6
End period	Period 6, 31 - 36
Description	The IC WS in A.T3.5 analyses the consortium's capability at addressing the WP's specific objective (i.e. promoting long-term sustainable uptake of solutions, to enable wide spread adoption of circular-value in manufacturing value-chains) via feedback gained at meetings of SB (D.T3.5.2, 7 meetings) & TP (DT3.5.3, 7 meetings), feeds improvements into SMART CIRCUIT & extends user-group of results. In WP3, IC WS aims to assess the long-term sustainability & viability of the Circular Industry Futures Factory Solution & provide feedback to keep market/strategic focus & promote dissemination and wider access to the Service Portfolios & Service Solution. Comms WS AT3.5: consolidated results infographics (board pack) + press release on the project's key final results (w/press partner - 12 total, release in English & local language). Public webinar on key results + Master Classes (6, 2 x PP meetings-see C7: TECOS, Slovenia, M31 & HGK, Croatia, M36) uploaded to YouTube.

Deliverables 3.5

Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.3.5.1	IC Guidance to Establish Process Assessing Circular Industry Futures Factory Solution / PP9 /PBN	1 guidance, building on AT1.5&2.5, establishes analysis & feedback mechanism on Circular Industry Future Factory, linked to PP meetings (See C7). Board Pack Instructions & Expected Infographics & Results List + sets market & strategic benchmarking processes with the project's ASPs.	Period 1 , 1 - 6
D.3.5.2	SDLs & Impact Reports for Factory Solution PP9/PBN (Prep	7 SDLs to present results to SB (with results pack). Provide direct results update & gains feedback from project ASP SB on the Task Force subject focus, the Circular Industry Future Factory Pilot & Solution &	Period 6 , 31 - 36

Deliverables 3.5

Deliverable Number	Deliverable title	Deliverable description	Delivery period
	/Mod) & PP11 /INTEMAC (Report)	promotes wider dissemination & uptake of results via SB. Links made between 3 WPs.	
D.3.5.3	Technical Foresight Expert Panel & Circular Industry Future Masterclass PP8 /TECOS & PP12 /HGK	7 Meetings of the TP, digital & physical presence, to gain insights & feedback on technical development of Circular Industry Future Factory. 6 Masterclasses (30min-1hr) during M31 – Slovenia & M36 - Croatia to enhance circular value-chain understanding & promote cross territory exchange.	Period 6 , 31 - 36

Outputs

Please define the outputs which will be realised through the activities foreseen in this work package and link them to the related programme output indicators.

Output number 3.1

Output title	The Circular Industry Factory (FACTORY) "See & Feel" Pilot, 1 Transnational System Designed & Implemented to Help Enterprises Take-Up Digital /Tech-Driven Circular Solutions & Services (WP Lead: TECOS)
Programme output indicator	RCO84_2.3: Pilot actions developed jointly and implemented in projects
Measurement unit	pilot actions
Output target value	1.00
Delivery period	Period 5, 25 - 30
Output description	A jointly implemented transnat. system (A3.3) consisting of 4 co-created Transnat. Pilots (2/PPs) to support CE Manufacturing Eco-System enterprises (DT3.2.1) engage w/ the value-creation opportunities of digital-technology driven CircEc. The method helps key players adopt circular principles & creates an operational support framework cascading from the CIRCUIT (A3.1). Sector Focus: Construction, Textile, Electronics & cross-sectoral circular production/tech value-chains. Delivered in D3.3.3.

Output number 3.2	
Output title	The Circular Industry Factory (FACTORY) Solution: Service Portfolios & Flagship Projects for Wider Spread Value-Creation using Digital/Technology-Driven Circular Economy (WP Lead: TECOS)
Programme output indicator	RCO116_2.3: Jointly developed solutions
Measurement unit	solutions
Output target value	1.00
Delivery period	Period 6, 31 - 36
Output description	A co-created transnat. system to support the long-term sustainable upgrade of CE manufacturing eco-system & spread of value-creation service solutions. 4 detailed transnat. 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).

Investments

C.5 Project results

Please select and quantify the relevant programme result indicators to which your project will contribute. For each selected result indicator, please briefly describe the contribution of the project and the relevant project results (change) you expect to achieve through the implementation of the foreseen activities and outputs as defined in the work plan. Please also specify the output(s) which are directly related to this result.

Result 1

Programme result indicator	RCR84_2.3: Organisations cooperating across borders after project completion
Measurement unit	organisations
Baseline	0.00
Target value	33.00
Result description	SMART CIRCUIT NET, linked to Output 1.1 & embedded as a horizontal approach in the project in AT1.1, AT2.1 & AT3.1. In the project the PPs build the CIRCUIT as a lasting cooperation network, built on DIH stakeholder eco-systems, to enhance regional & interregional cooperation on digital /technology-driven circular economy for robust CE manufacturing future. 12 PPs represent cross-territorial Digital Innovation Hubs (DIHs) & 24 TP Foresight Experts & SB Members (ASPs), bring external excellence into cooperation network. Formalized through, first & foremost, the grant agreement & ongoing cooperation in the 4 transnat.-oriented strategic Task Forces (TF), aligned market /policy-oriented Pilots & assured long-term cooperation after project completion via agreements in 4 value-chain Service Portfolios, a lasting MoU & 4 transnat. Flagship Solution projects (leveraging synergies with other nat. & EU instruments, e.g. Horizon Europe & ERDF regional, transnat. & cross border & DEP, eDIH works).

Result 2

Programme result indicator	RCR104_2.3: Solutions taken up or up-scaled by organisations
Measurement unit	solutions
Baseline	0.00
Target value	1.00

Result 2

Result description	Circular Innovation Academy (CIA), linked to OT1.2 (CIA Pilot) & 1.3 (CIA Solution), is embedded vertically in the project work plan in AT1.2, AT1.3 & AT1.4 (& evaluated in AT1.5). The CIA is formed & exists into the future as an upskilling platform for professionals in DIH Eco-Systems (RTO & BSO, mainly + Enterprises, Policy & other TGs), to learn to 'close-the-loop' in production environments using digital/tech driven circular economy, via education on the circular production/tech value-chain, how this is applied effectively & adopted in high-need manufact. Sectors (incl. 21 Masterclasses from Tech Expert/ASPs). Professionals gain capacities to translate the value of circular economy to promote resource efficient industry. PPs set curriculum (working with ASPs) & structure of learning hub & test/validate the model w/ 22 trainees completing program & finally set lasting model (& 120 new trainees) for widespread use of CIA to enhance capacities to adopt circular economy in industry.

Result 3

Programme result indicator	RCR104_2.3: Solutions taken up or up-scaled by organisations
Measurement unit	solutions
Baseline	0.00
Target value	1.00
Result description	Circular Industry Futures Strategy Lab (STRATLAB) is linked to OT2.1 (Pilot) & OT2.2 (Solution) & vertically embedded in the project plan via AT2.2, AT2.3 & AT2.4 (& evaluated in AT2.5). The STRATLAB is a solution aimed at bridging a key strategic gap between policies/strategies addressing circular economy & digital industry (EU Industrial Strat & Digital Decade, the Green Deal + EU CEAP + connected work programs in HE, DEP). STRATLAB is a transparent forum of responsible stakeholders who address/implement these policies & promotes a method for reducing barriers & leveraging opportunities at the intersect of these policies (e.g. through optimised use of policy instruments & collective accountability in private & public partnership cooperation). The scaled Solution is a connected set of regional (w/ transnational

Result 3	
	impulses) multi-stakeholder forums to generate synergies in circular economy policy/regulation adoption to research & innovation smart specialisation strategies.

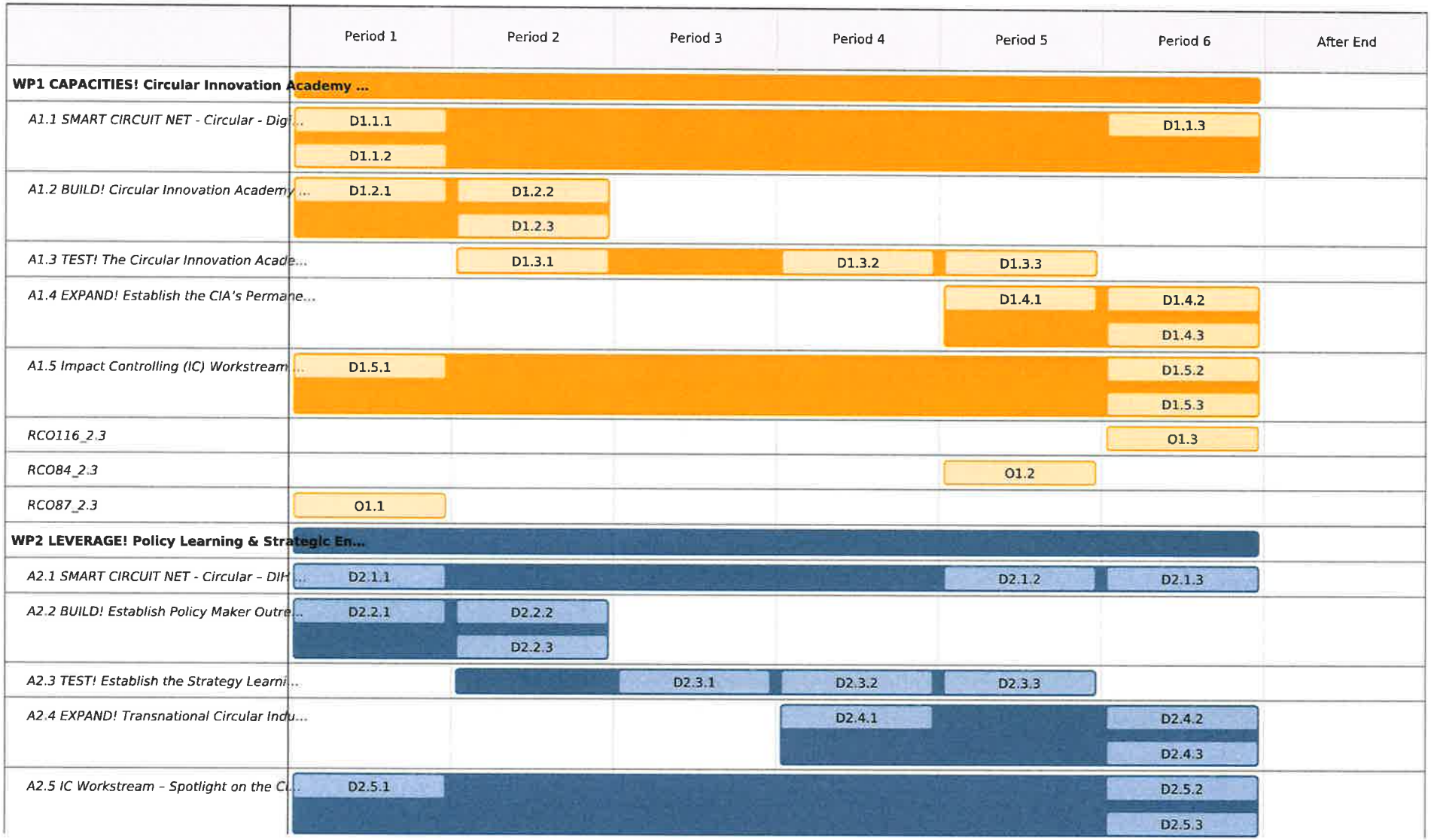
Result 4	
Programme result indicator	RCR104_2.3: Solutions taken up or up-scaled by organisations
Measurement unit	solutions
Baseline	0.00
Target value	1.00
Result description	Circular Industry Futures Factory Solution (FACTORY) is linked to OT3.1 (Pilot) & OT3.2 (Solution) & is vertically integrated in to the work plan in AT3.2, AT3.3 & AT3.4 (& evaluated in AT3.5). The FACTORY aims to deliver enterprises the chance to experience the value-creation opportunities of digital/tech.-driven circular economy in manufacturing. Thus, helping key industry in need of 'closing-loops' (high resource use & high potential for circularity) access critical, market & policy support to navigate the adoption, implementation of technologies. The FACTORY uses services, experience & network of the CIRCUIT to test, implement & expand a transnat. approach delivering service-solution support to industry players in 3 key sectoral value-chains closing-loops in construction, textile & electronics & fosters cross-sectoral services to production (in line w/ EU CEAP S.2.2), to allow wider adoption & consolidated trans. tech. portfolios for the circular tech/production value-chain.

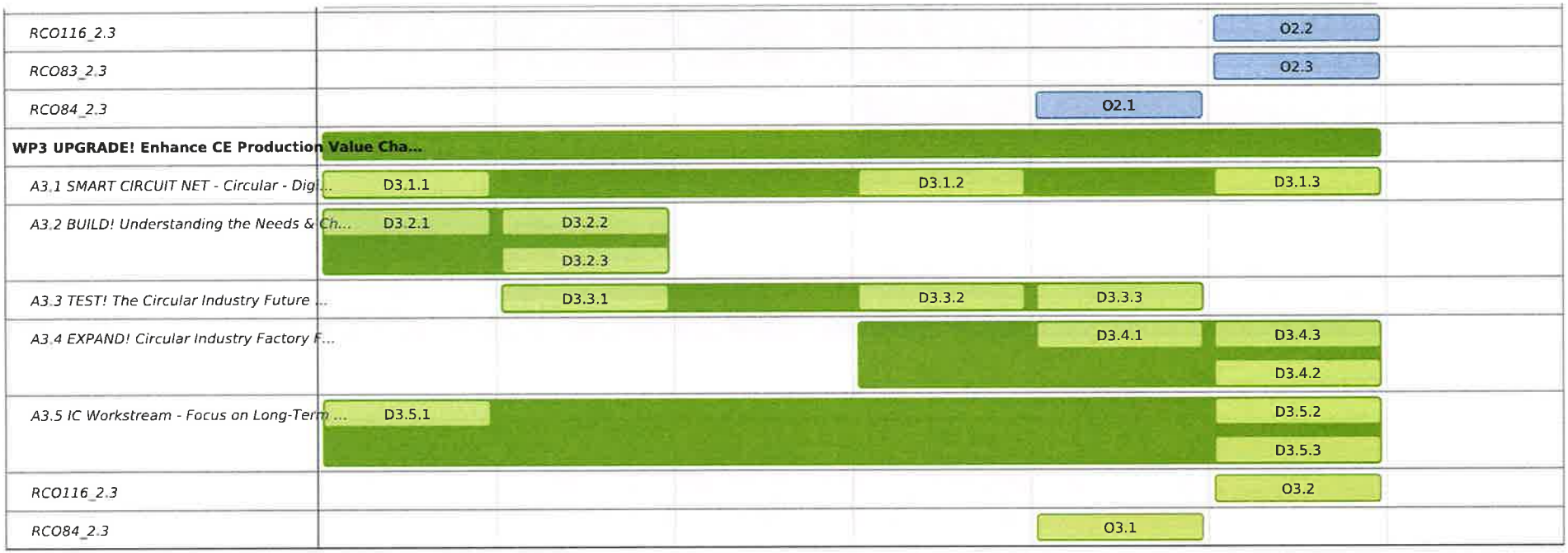
Result 5	
Programme result indicator	RCR79_2.3: Joint strategies and action plans taken up by organisations
Measurement unit	joint strategy/action plan
Baseline	0.00
Target value	1.00

Result 5

Result description	Central Europe Circular Industry Futures 2030 Strategy & Action Plan is linked to OT2.3 & OT1.1, & vertically & horizontally integrated in the work plan in AT2.2, AT2.3, AT2.4 & AT1.1 (&evaluated in AT2.5, with the STRATLAB). This lasting, joint strategy provides the blueprint for policy/industry engagement & permanent brokerage via the transnational DIH-ecosystem. It provides both regional & transnational plans to foster collaboration & use project results to set thematic & instrument recommendations for future-oriented growth & creation of shared value (CSV) in CE's manufacturing eco-system. It fosters the strategy to deliver: ongoing capacity building efforts, barrier reduction & investment leverage & close-the-loop services for key production value chains critical to CE's achievement of key climate & resource-use targets. It builds strategic connections to regional RIS3 + demonstrates sustainability through practical steps (rooted capitalised initiatives, incl. AT3.4 Flagships).

C.6 Time plan


Period 1
Period 2
Period 3
Period 4
Period 5
Period 6
After End
WP1 CAPACITIES! Circular Innovation Academy ...
A1.1 SMART CIRCUIT NET - Circular - Digi...
D1.1.1
D1.1.2
D1.1.3
A1.2 BUILD! Circular Innovation Academy ...
D1.2.1
D1.2.2
D1.2.3
A1.3 TEST! The Circular Innovation Acade...
D1.3.1
D1.3.2
D1.3.3
A1.4 EXPAND! Establish the CIA's Permane...
D1.4.1
D1.4.2
D1.4.3
A1.5 Impact Controlling (IC) Workstream ...
D1.5.1
D1.5.2
D1.5.3
RCO116_2.3
O1.3
RCO84_2.3
O1.2
RCO87_2.3
O1.1
WP2 LEVERAGE! Policy Learning & Strategic En...
A2.1 SMART CIRCUIT NET - Circular - DIH ...
D2.1.1
D2.1.2
D2.1.3
A2.2 BUILD! Establish Policy Maker Outre...
D2.2.1
D2.2.2
D2.2.3
A2.3 TEST! Establish the Strategy Learni...
D2.3.1
D2.3.2
D2.3.3
A2.4 EXPAND! Transnational Circular Indu...
D2.4.1
D2.4.2
D2.4.3
A2.5 IC Workstream - Spotlight on the C...
D2.5.1
D2.5.2
D2.5.3


RCO116_2.3
O2.2
RCO83_2.3
O2.3
RCO84_2.3
O2.1
WP3 UPGRADE! Enhance CE Production Value Cha...
A3.1 SMART CIRCUIT NET - Circular - Digi...
D3.1.1
D3.1.2
D3.1.3
A3.2 BUILD! Understanding the Needs & Ch...
D3.2.1
D3.2.2
D3.2.3
A3.3 TEST! The Circular Industry Future ...
D3.3.1
D3.3.2
D3.3.3
A3.4 EXPAND! Circular Industry Factory F...
D3.4.1
D3.4.3
D3.4.2
A3.5 IC Workstream - Focus on Long-Term ...
D3.5.1
D3.5.2
D3.5.3
RCO116_2.3
O3.2
RCO84_2.3
O3.1

C.7 Project management and communication

In addition to the thematic activities as described in the work plan, you need to foresee adequate provisions for project management, coordination and internal communication.

C.7.1 How will you coordinate and manage your project?

Please describe how the project management on the strategic and operational level will be carried out, including the set-up of management structures, responsibilities and procedures, as well as risk management. Please also explain how the internal communication within the partnership will be organised.

Project Lead KPT set a sound strategic & operational management matrix in SMART CIRCUIT. At project start, KPT set Rules of Procedure (responsibilities & accountabilities matrix [RACI], operational processes for ongoing financial & quality content management & evaluation, internal communication & risk management rules & steering committee (SC) establishment). 3 WPs are structured to bring timely focus to each development stage & are vertically integrated to steward one strategic objective/result indicator, one pilot & one solution, w/ a BUILD!, TEST! & EXPAND!, phase, common to all WPs. 3 WSs intersect the WPs, on topics of management, communication/impact controlling & cooperation networks. The WP & WS matrix brings greater collective accountability & distributes responsibility across the Partnership/Territories. WPL 1 is mtSW w/ a focus on the CIA, WPL 2 is TUKE w/ a focus on the STRATLAB, WPL 3 is TECOS w/ a focus on the Factory. WS IC & Comms is managed by PBN (See C.7.3 for more info). The cross-cutting thematic WS, on SMART CIRCUIT NET, is led by IWU. These PPs + KPT form the Project Management Team (PMT). KPT is primarily responsible for strategic engagement with the JS/MA, each PP maintains strategic engagement channels. with their ASPs & stakeholder community. At operational level, KPT establish monthly jour-fix (online) for project check-ins & regular risk management reviews; internal communication occurs by teleconferences, calls & emails & KPT establish a shared-drive for joint development of deliverables/joint access to management & communication rules. Each PP nominates a PMT incl, individual for project management/content development, finance/comms + a legal rep. (or delegate) for SC. The SC meet six-monthly & receive the risk management review report from the LP. Ad-hoc meetings also occur to mitigate risk, where necessary, minutes available for JS /MA review. WPL create detailed Gantt (deliverable & sub-deliverable time management) & guidelines for WP & delivers regular updates on results for 6 monthly, face2face meetings & monthly jour fix. Every deliverable has a named deliverable responsible lead, who steward high quality & on-time completion of project thematic work.

C.7.2 Which measures will you take to ensure quality in your project?

Describe the planned approach and processes for quality management, i.e. how the quality of deliverables and outputs will be monitored and ensured, and indicate the responsible partner(s). If you plan to conduct any type of project evaluation, please describe its purpose and scope.

SMART CIRCUIT builds high quality results & impact controlling processes in each WP. Each project result is overseen by a WPL, who is responsible for bringing the PP's focus towards one specific result indicator(s), which is linked to a thematic circular goal which is stewarded through the WP's Outputs (which are all linked to work plan activities, see section C.5 for more info). PPs & ASPs work together every six-months to enable regular quality evaluation & determine the methodological relevance & ensure future-foresight/ market & strategic relevance for all of the project's vertical pilot /solution development processes (BUILD! TEST! & EXPAND!). Three horizontal Work Streams (WS) are used to manage quality & boost connections & finally control project quality. PBN is WS Communication & IC Lead & sets communication tasks + coordinates strategic engagement with TP & ASPs (See more in C.7.3).WS IC is specifically used to judge & adjust the achievement of project work associated to this wider project result (linked to six-monthly meetings of the ASPs, during the thematic Circular Industries Conference & meeting of the Technical Foresight Panel (TP) & Strategic Dissemination Board, see AT1.5, AT2.5 & AT3.5 for more info).In WP1, mtSW focus on project's capacity building & functionality to promote adoption of circular economy as part of the CIA (OT1.2 & OT1.3) & stewards in OT1.1 SMART CIRCUIT NET. In WP2, TUKE focus on implementation & financial leverage through the efficient & effective execution of the STRATLAB (OT2.1 & OT2.2) & build /delivery of the Circular Industry Futures Strategy 2030 (OT2.3). In WP3, TECOS focus on long term sustainability and wide-uptake of circularity into production-oriented value-chains through the transparent & open capitalisation of the FACTORY (OT3.1 & OT3.2). All of the project's Outputs (pilots & solutions) are transnationally co-created & evaluated through regular TF discussions & twinned peer reviews from within the community (via PP & ASP feedback). This allows transnationally-derived, high-quality collaboration to be at the heart of all thematic work.

C.7.3 What will be the general approach you will follow to communicate about your project?

Please describe how your project's communication objectives, as outlined in the work plan, will help with achieving your project's main result(s). Why is communication important? Which common tactics, channels and tools will help the partnership to reach out to and involve its target audiences? How will the project communication coordinator ensure that all project partners are involved and contribute to communication?

SMART CIRCUIT communication (comms) fosters dissemination connected to thematic work in each WP. Comms. on the project & outputs is crucial to build a common understanding on circular economy across CE/EU, to share knowledge to increase circular capacities & to upgrade the production value chains integrating more circular processes. Comms. activities are spread throughout the project under the responsibility of PBN (PP9), acting as WS Lead. At project start, PBN creates: sound comms. strategy, plan & handbook, in line with program branding rules; the project website; project poster (to be printed & displayed at all PP premises); & the social media (Youtube & LinkedIn channel) + establishes links to PP channels. Comms. activities are performed by PPs (led by PBN) according to plan, w/ content uploaded & updated regularly. Every PP delivers regular (1/PP /period) webinars w/ reg. DIH Eco-system (DT1.1.3), present at min. 3 events to present project (1 /WP/PP =36 total) + recordings for public use. PP & ASPs host 6-monthly public conferences, including filmed & live streamed expert seminars in the Circular Industry Futures series (M1-PL, M7-AT, M13-DE, M19-IT, M25-HU, M31-SL, M36-HR). Also, partners create media partnerships to disseminate results in own language/eco-system. Over 100+ videos (short & long, english + local language with subtitles) are created to emphasize key thematic activities, thanks to recording at events/interviews (DT 2.2.2 & DT3.2.2)/Master Classes/ Webinars/ Pilot Actions Narratives (AT3.4) & Vlogs (DT2.1.2). Digital tools complement tangible comms assets: Brochures on (1) CE circular industry & (2) Value-chain service portfolio & Flagships + 4 press releases (DT1.1.2, AT1.5, AT2.5, AT3.5) & 1 picture marketing campaign (AT1.3). Infographics are created along the project for visual storytelling to summarize key results (see C4 for more). The comms. plan targets the full ecosystem (quadruple helix: DIH, PAs, HER, Enterprises, Public) through wide, external, dissemination of the results.

C.7.4 How do you foresee the reporting procedures for activities and budget (within the partnership)?

Please describe the reporting processes at the level of partners towards the lead partner.

SMART CIRCUIT establish processes for 3-fold reporting & monitoring (interactive & continuous project monitoring, project reviews & period joint progress reports, including content milestones & financial reporting procedures) to achieve agreement between PP/LP/MA/JS. KPT create monitoring plan (esp. milestones) in discussion with PPs, MA&JS; Project Reviews estimated in M13 & M25 (online review or physical during Circular Futures Conference). KPT establish all project-start reporting obligations on JEMs & manage all ongoing processes to deliver joint progress reports (agreed in Subsidy contract, 6 monthly finance & annual content reports). PPs deliver partner report in a timely manner to consolidate joint report. To achieve continuous risk & deviation monitoring for content, KPT's shared-drive allows joint content development & oversight for PP Deliverable Responsible (DR). Each deliverable has a DR PP(s), providing development & quality oversight on PP' s work & timeliness. WPL sets WP Content & Delivery Rules (with sub-deliverable Gantt & result descriptions) & DR PPs steward rules to completion. All Deliverable (Guidance & Reports & connected Outputs) are reviewed by WPL & LP, plus all PPs & ASPs during six-monthly meetings. As in C.7.1, monthly-online meetings provide timely updates on WPs; PPs provide PP DR updates & PP DR & WPL provide onward updates to full PPs for all active activities. KPT manage 6-monthly risk review & reporting, w/ the SC + ad-hoc issues if needed. Plus, KPT sets forecast & actual budget reporting processes. PPs give LP forward estimates of budget use, giving LP insight on resource use across project. Requests for budget shifts must be submitted in writing to the LP & approved by the LP & SC. Where relevant appropriate JS/MA thresholds are met, the LP manage any threshold change requests. All reporting, monitoring, risk & change management (content & financial) processes are set in the Rules of Procedure, in M1 of the project.

C.7.5 Cooperation criteria

Please select the cooperation criteria that apply to your project and include a brief explanation. Please note that the joint development, joint implementation and joint financing criteria are mandatory.

Cooperation criteria		Description
Joint development	Yes	Joint development is essential & crucial for the success of SMART CIRCUIT. This principle was adopted since the project inception, when challenges, objectives, activities, outputs & results have been jointly designed. Milestones are also set jointly & matrix structure brings management framework to ensure collective accountability & joint development of all project thematic work.
Joint implementation	Yes	Joint implementation & co-creation is necessary in SMART CIRCUIT to "BUILD!" common structures, knowledge, tools & processes put this to "TEST!" in the three-project pilot implementation & "EXPAND!" to the three project solutions (WP1, CIA; WP2, STRATLAB, WP3, FACTORY). Joint implementation is also important for network development (SMART CIRUIT, ATX.1) & impact controlling (ATX.5). Thus, PPs create, together, transnational, mutual benefits & care for proper capitalisation & results usage.
Joint staffing	Yes	Project management is carried out in a common manner at project level (project content responsible, communication & finance responsible + steering committee legal representative, or delegate) avoiding duplication of functions, especially with regard to assigned Deliverable Responsible (DR) PPs for each activity & WP leader responsible for joint stewarding of activities. Activities leverage on complementary / synergic competences of project partners.
Joint financing	Yes	The budget has been allocated to partners according to their roles and a detailed activity plan. All activities are developed jointly in the consortium, leading to joint-financing. Especially joint pilot actions & joint solution development, which occur between the 12 PPs within their Strategic Task Force allocations. The LP is responsible for communication with the programme bodies, reporting & financial matters.

C.7.6 Horizontal principles

Please indicate how your project contributes to horizontal principles and provide a short explanation. With regard to environment protection, please also include an explanation how the "environmental sustainability by design" approach has been integrated and provide a brief assessment of possible environmental effects to your project.

Horizontal principles	Type of contribution	Description of the contribution

Horizontal principles	Type of contribution	Description of the contribution
Sustainable development and environment protection	positive effects	SMART CIRCUIT is built on the principle of advancing sustainability and fosters activities in line with the UN Sustainable Development Goals, the Paris Agreement & 'do no harm' principles, specifically embedding environmental sustainability by design across the project. With thematic content at the intersect of digital/sustainable in manufacturing (a key player to delivering climate neutral futures) the project framework promotes the adoption of circular economy to create regenerative growth & shared value for the economy, society & the environment, SMART CIRCUIT endeavours – at all- points, to create positive, lasting efforts. PPs does not seek to build any new infrastructure, and instead promotes optimal use of existing innovation & support infrastructure (from within the DIH eco-system) this already embeds upcycling/upgrading a key environmental by design principle, into the heart of the project. The paramount purpose of SMART CIRCUIT is to bring multi-stakeholder communities (enterprises, policy makers & more) towards more resource-efficient processes & procedures in manufacturing, to help CE territories work together to leverage knowledge & finance to reach key climate, energy & resource targets. The project structures (specifically the CIA, the STRATLAB & the FACTORY) are designed with sustainability in mind to ensure that future generations are able to benefit from the results of the project; and that all results focus on strengthening Central Europe's resilience & competitiveness to promote long-term, regenerative & sustainable growth. Each project output/result indicator has a sustainability & legacy plan, championed by members of the consortium (see C8, for more detail) to ensure long-term, wide spread & sustainable use of results, long after project completion. Finally, PPs commit to not producing unnecessary printed materials: reports, marketing leaflets /components, etc.
Equal opportunities and non-discrimination	positive effects	SMART CIRCUIT structure guarantees equal opportunity within the management framework and in all activities surrounding the project. Focusing on co-creation principles, especially with regards to the CIA & STRATLAB & FACTORY establishment, the Partners initiate activities where attempts are made to ensure that all views are given equal weighting and processes to support the engagement of normally marginalized voices are put into operation to reduce disparities. These principles are also embodied by PPs & delivered within each management level of the project. Any discrimination based on gender, racial, ethnic, religion, disability, age or sexual orientation will not be tolerated in the consortium & clear/transparent (and also ethically-compliant, i.e. data-sensitive), reporting, evaluation & disciplinary processes will be included in the project Rules of Procedure to ensure issues are handled effectively, if they are to arise.

Horizontal principles	Type of contribution	Description of the contribution
Equality between men and women	positive effects	Building on SMART CIRCUIT's actions to promote equal opportunity, equality between men, women & all genders are supported. PPs ensure balanced gender participation at all levels (management, operational, communication + at ASP-level, Strategic Board & Technical Panel members). Non-discrimination is critical for this context, and active communication will take place to create a participant equilibrium which promotes the principle of all-gender inclusivity. This & other horizontal principles are incorporated into management impact controlling work streams (ATX.5) to be monitored and evaluated throughout the project duration, and any disregard for these principles, will not be tolerated by the consortium.

C.8 Long-term effects and durability

Projects should have a long-lasting effect in the territories and for the relevant target groups. Please describe below how this will be ensured.

C.8.1 Ownership/durability

Please describe who will ensure the financial and institutional support including maintenance for outputs and, if applicable, for most important deliverables developed by your project.

All project Outputs (& connected Results) are designed to exist into perpetuity, and are jointly owned & stewarded by all project partners. The CIRCUIT, itself, is the organisation/network structure which supports & maintains the other Outputs (generally). The formalization of this network occurs throughout the project, locking in joint activities & long-term development alongside the strategic Task Forces. A Memorandum of Understanding, underpinned by a financed Action-Plan (AT2.1 & AT2. 4) & linked to the PPs Solution Flagships create the ongoing maintenance of action – especially related to the Factory Solution (AT3.4). The FACTORY Solution is also stewarded into the future via the agreed Service Portfolios for each Circular Innovation & Development Corridor (CIDC) established between connected DIHs. This Portfolio will be an active solution, ready to market technology/digital solutions packages to the developed value-chains (and beyond, via the cross-sectoral task force), to deliver circular economy services in an ongoing way. For the CIA, a legal framework or adoption concept (depending on project outcomes) will be established to bring forward a lasting training /upskilling platform for Professionals. This will also be financed (initially), by a series of cross-border projects with the interested parties of the Consortium. The STRATLAB's goal is to be established as a formal activity of the involved DIHs in coordination with regional agencies responsible for RIS3 – all the connected DIHs involved in SMART CIRCUIT already take a key role with regional stakeholders to build this connection for digital transformation specialisations & therefore will enhance their role associated to circularity & its cross-cutting impact on key manufacturing eco-systems, ex. Platform Internationalisation Burgenland.

C.8.2 Lasting effects

Outputs and deliverables should be made available and used by relevant target groups (project partners or other stakeholders) after the project's lifetime, in order to have a lasting effect on the territory. Please describe how the outputs and deliverables will stay available and will be taken up or upscaled by the project partners.

All project Outputs & connected deliverables are published transparently on the project website & pushed out over project communication channels & with project press-media partnerships. Each aspect is derived in a transparent & lasting way, to be accessed by the widest target-group possible. Upscaling-promoting the take-up of results-is a key part of SMART CIRCUIT's EXPAND! Phase of Pilot /Solution development in each WP. For the CIA (WP1 – CAPACITIES!), this upscaling happens through the inclusion of 120 new CiVEs in Training, from newly integrated DIHs (&DIH eco-system members) to allow for widest use of training curriculum & platform. Further, the CIA is going to be formalised into its own legal entity/adopted into the PPs operating structure, for permanent use. For the STRATLAB (WP2 – LEVERAGE!), this upscaling happens through the formalisation of relationship between the DIH & territorial policy-stakeholders through a lasting dialogue-based forums on Circular Economy (linked to existing RIS3 territorial stakeholder forums) to promote regional & transnat. knowledge brokering on digitally-enabled circularity in industry, over 360 stakeholders included in STRATLAB pilot/solution activity. For the FACTORY (WP3 – UPGRADE!), this upscaling happens through the expansion of the consortium's operating Service Portfolio & applications (building Pilot FACTORY tests, into lasting transnat. circular innovation & development corridors) towards 4 Solution Flagships (which extend operational methods, i.e. additional included TGs (enterprises & BSOs & RTOs) + further financing). Finally, the CIRCULAR INDUSTRY FUTURES 2030 strategy, sets a strong strategic road map & practical action plan (w/ collective accountability across territorial stakeholders, incl. 28 DIHs) to help steward the upscaling efforts & continue positive develop associated to all Outputs, into the future. Special efforts are made to build synergies (using RIS3), w/ EU digital & industry strategies, to ensure long-lasting applicability of strategic efforts developed in SMART CIRCUIT.

C.8.3 Transferability

Please describe how outputs and deliverables could be adapted or further developed to be used by additional target groups or rolled out in other territories beyond the partnership. How will communication activities ensure that relevant groups are aware of the available outputs and deliverables to be used?

The uptake & transfer of results (outputs & deliverable actions) is a key part of SMART CIRCUIT, built into the development logic. Each WP fosters a BUILD!, TEST! & EXPAND! Phase, associated to the project's main results. PPs fortify their work for lasting-sustainable-widespread uptake starting during AF formulation (even pre-BUILD!) by establishing strong partnerships with key strategic & technical ASPs, to assist in project quality, dissemination & transfer strategy. In the Work Plan, transferability can be seen expressed in EXPAND! Activities (AT1.4, AT2.4 & AT3.4) & Impact Controlling Activities (AT1.5, AT2.5 & AT3.5), for each WP main result (WP1 – CAPACITIES!, CIA; WP2 – LEVERAGE!, STRATLAB; WP3 – UPGRADE!, FACTORY). CIRCUIT expansion occurs via the invitation of additional stakeholders during regional exchange session (DT1.1.3, also leveraging communication tools/media partnerships to reach mainstream & peripheral players) + use & delivery of strategic Service Portfolios to 28 DIHs incl. transfer to key macro-regional territories (DAN, MED, ASP, BSR, etc.) (DT2.1.3, also leveraging communication campaign to extend knowledge & provide clear channels to access circular solutions/services). CIA transfer occurs, by extending life of CIA in own legal form/adopted by PPs, and access opening to over 120+ new trainees, CE & pan-EU students, (DT1.4.3), incl. connections fostered by cross-border program ERDF + DEP (skills) + HE links (digital tools, especially student stories/vlogs & press release in local languages on CIA, are used to reach out to other regions). STRATLAB transfer happens through the long-term connection of circular-digital value creation as part of regional RIS3 forums + inclusion of additional transnational territories (transnat. Panels 2x in project) to bring stories of instrument & support measures to foster circular/digital divides. FACTORY transfer happens via establishing 4 Flagship Solution projects, incl. new territories to establishing longer value-chain focus & uptake of service solutions across EU using comms tools, incl. press releases & participating in external events – like that of EU Circular Economy Stakeholder Forum – help territorial transfer out of CE.