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CIREVALC STRATEGY

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I. Executive summary

The transition towards a Circular Economy (CE) in the Food, Catering, and Packaging (FCP) sectors represents a critical pathway for achieving sustainable development, competitiveness, and resilience across Central Europe. The CIREVALC Strategy responds to this challenge by providing a comprehensive and operational framework to support the introduction, testing, and upscaling of circular economy models within regional value chains. It is grounded in extensive regional analyses, sectoral mappings, pilot implementation experiences, and peer-reviewed findings, as well as the jointly developed CIREVALC Accelerator Guide.

The Strategy addresses a shared set of structural barriers identified across participating regions. These include low awareness and engagement among SMEs and local communities, insufficient skills and technical capacity, fragmented and complex regulatory frameworks, limited access to finance, technological and infrastructural gaps, weak value-chain collaboration, and low market pull for circular solutions. Despite strong EU-level policy momentum and the availability of funding instruments, the uptake of advanced circular business models in the FCP sectors remains uneven, with significant disparities between regions and countries.

The Strategy defines five integrated strategic directions to guide implementation:

1) strengthening circular business models in FCP sectors,

2) enhancing financial and regulatory support for SMEs,

3) building skills, knowledge, and awareness through the Circular Community Accelerator,

4) supporting infrastructure and technology development, and

5) fostering interregional and cross-sectoral collaboration.

Together, these directions form a coherent roadmap that aligns regional actions with EU Circular Economy Action Plan objectives and the European Green Deal, while remaining adaptable to local contexts and sector-specific needs.

A robust strategy implementation system underpins the proposed strategic directions, ensuring clarity of roles, effective coordination, access to financing, and continuous learning. Central to this system is a comprehensive monitoring and evaluation framework that supports accountability, evidence-based decision-making, and adaptive management. The Strategy also explicitly addresses feasibility, bottlenecks, and risk factors, proposing mitigation measures to manage financial, regulatory, behavioural, and institutional risks that may affect implementation.

The CIREVALC Strategy introduces the Circular Community Accelerator as a practical, multi-level support mechanism designed to empower SMEs, NGOs and local communities, strengthen regional ecosystems, and foster cross-sectoral and cross-regional cooperation. The Accelerator combines tailored advisory and diagnostic services, capacity building and skills development, pilot demonstration actions, technology testing, and structured networking activities. Its methodological approach follows a clear logic: diagnostics and baseline assessment, roadmap development, pilot implementation, evaluation, scaling-up, and long-term institutionalisation.

By strengthening cooperation between SMEs, public authorities, business support organisations, research institutions, and civil society, the Strategy aims to deliver durable environmental, economic, and social benefits, contribute to regional innovation and competitiveness, and support the transition to resilient, circular food and packaging systems.

II. Strategy mission

Mission

The mission of the CIREVALC Strategy is to enable and accelerate the systemic transition of the Food, Catering and Packaging (FCP) sectors in Central Europe towards circular economy models that are economically viable, environmentally responsible, and socially inclusive.

The mission is rooted in the recognition that achieving circularity in FCP value chains requires not only technological innovation, but also strong institutional capacity, skilled human resources, coordinated ecosystems, and sustained behavioural change across markets and communities.

CIREVALC's mission is to translate circular economy principles into practical, implementable actions by providing tailored diagnostic and advisory support, capacity-building services, pilot testing opportunities, and structured networking platforms. By fostering collaboration between businesses, research and innovation institutions, public authorities and civil society actors, the Strategy promotes the creation of resilient regional ecosystems capable of closing material loops, reducing waste, extending product life cycles, and creating new circular business models.

At the transnational level, the Strategy seeks to strengthen cooperation across Central European regions, enabling knowledge exchange, harmonisation of approaches, and replication of successful practices. The mission of CIREVALC is therefore also to bridge regional disparities, support less advanced territories, and ensure that circular transition benefits are broadly shared across regions with different starting points, capacities, and development paths.

Ultimately, the CIREVALC Strategy aspires to position the Circular Community Accelerator as a permanent catalyst for circular transformation in the FCP sectors, aligned with EU Circular Economy Action Plan objectives and the European Green Deal. By integrating policy learning, innovation, and long-term institutionalisation, the Strategy's mission is to contribute to more competitive, resource-efficient, and future-proof food, catering and packaging systems in Central Europe.

III. Development challenges with regards to introduction and upscaling of circular economy models in the FCP sectors

1. Identified key development challenges

Circular economy uptake in the FCP sectors across Central Europe is constrained by a set of systemic, operational, financial, regulatory, and behavioural challenges. Insights derived from regional review papers, accelerator design documentation, pilot implementation and evaluation reports reveal a remarkably consistent pattern across CIREVALC cooperating countries that enabled identifying the key development challenges affecting implementation of circular solutions in the FCP sectors.

1.1 Low awareness, limited engagement and non-receptive communities

Across all CIREVALC partner regions, low awareness of circular principles among SMEs / organisations, consumers, and local communities significantly slows adoption. Many enterprises still perceive circular economy as an abstract environmental concept rather than a driver of competitiveness. This results in:

- Minimal **understanding of circular economy benefits and obligations**.
- Weak **community motivation** and behavioural resistance to new practices, such as waste separation, reuse, or circular product design.
- Limited participation in voluntary **circular economy initiatives or collaborative schemes**.

CIREVALC explicitly identifies “low awareness, low engagement, non-receptive communities” as a central barrier hindering circular economy uptake in FCP sectors.

1.2 Lack of skills, knowledge and technical capacity

SMEs, NGOs, local communities in the food, catering, and packaging sectors struggle with the technical and organisational complexity of circular transition. Common gaps include:

- Limited know-how in **circular design**, **resource efficient production**, **waste valorisation**, and **bio based or recyclable packaging solutions**.
- Insufficient skills for **material flow assessment**, **circularity audits**, or **life cycle thinking**.
- Lack of **internal capacity** to identify valuable by-products, optimise processes, or redesign existing business models.

Lessons learned during the CIREVALC pilot action confirm consistent deficits in SME knowledge, expertise, and access to circular economy tools in nearly all countries assessed.

1.3 Regulatory complexity, uncertainty and fragmentation

The regulatory environment is perceived as one of the strongest cross-regional barriers that refers to:

- Complex and rapidly changing legislation on **packaging**, **waste classification**, **bio waste management**, **EPR**, and **ESG related reporting**.
- Ambiguous **interpretation of requirements**, especially for SMEs lacking legal expertise.
- Slow or inconsistent **transposition of EU directives** (e.g., separate bio waste collection rules).
- Insufficient **guidance on compliance pathways** and sector specific obligations.

CIREVALC pilot findings confirm that legal uncertainty was a major challenge requiring repeated expert clarifications during acceleration activities.

1.4 Financial barriers and limited access to funding

High initial costs and limited investment capacity are major obstacles for SMEs, NGOs and local communities wishing to implement circular economy solutions. The challenges in this thematic area include:

- High **cost of new technologies, waste recovery units, energy-efficiency upgrades, or circular packaging innovations**.
- Low **awareness of available public support schemes** and difficulty **navigating complex grant criteria**.
- Insufficient **private financing**, especially for early-stage circular solutions that require experimentation, testing and very often support of research and development units/institutions.
- **Risk** aversion among SMEs / organisations due to unclear **business returns on circular investments**.

All CIREVALC regions identify lack of financing as a persistent barrier, therefore new and fitting support schemes and tailored financial guidance should compensate for this gap.

1.5 Infrastructure and technological gaps

Circular transition depends on **adequate infrastructure** such as:

- High quality waste sorting and recycling facilities, especially for complex packaging materials.

- Facilities supporting food waste prevention, bio waste processing, and industrial symbiosis (e.g., composting, anaerobic digestion).
- Technological capacity for testing circular prototypes, new packaging materials, or digital monitoring tools.

The CIREVALC experience shows that many regions, especially rural and semi urban area, lack the technological backbone needed to close loops effectively.

1.6 Fragmented value chains and weak collaboration

Circularity in FCP sectors relies on cooperation between producers, processors, caterers, retailers, and waste managers. In this area the current challenges include:

- Insufficient **coordination of cooperation between stakeholders**.
- Weak **integration of food producers with hospitality/catering services and packaging suppliers**.
- Limited **matchmaking opportunities** for industrial symbiosis (e.g., identifying partners who can use each other's by-products and in their production processes).

Pilot insights confirm that strengthening value chain collaboration is highly important to enable new circular business models.

1.7 Operational barriers

Even when awareness or tools exist, SMEs / organisations face practical, day-to-day barriers that slow circular economy integration:

- Lack of **time and staff capacity** to redesign operations.
- Difficulty **integrating** circular economy goals **into daily routines and procurement practices**.
- Limited ability to **conduct internal sustainability measurements** or **adopt digital solutions**.
- Bureaucratic burden and limited access to **simplified reporting tools**.

The Accelerator's tested services summary proves that many SMEs / organisations required support simply to interpret and prioritise next steps, showing how foundational these barriers are.

1.8 Consumer behaviour and market demand issues

Circular products and services in FCP sectors depend heavily on market acceptance. Challenges in this area include:

- Low **consumer willingness** to pay for sustainable packaging or waste reduced food services.
- Limited **public understanding** of reuse systems, refill models, or upcycled food products.
- Inconsistent **demand for circular packaging** formats from retailers and distributors.

Multiple regional analyses underscore the continued perception that green products are more expensive, creating demand side stagnation.

1.9 Limited monitoring, measurement and data availability

Circularity requires evidence based decision making, which in turn is hampered by the following challenges:

- SMEs lack **tools to measure** resource flows, food waste, material losses, or packaging recyclability.
- **Data collection systems** are inconsistent or technically demanding.
- Regions lack **harmonised circular economy indicators**, hindering benchmarking and long term planning.

Pilots revealed the need for simple diagnostic tools as a universal element of support fostering planning and up taking circular solutions.

1.10 Slow uptake of circular business models

While recycling is becoming more mainstream, higher order circular business models (reuse, repair, product as a service, upcycling) are still rare in FCP sectors due to:

- Uncertainty regarding **financial viability**.
- Lack of **sector specific examples or best practice** demonstrations.
- Difficulty **transitioning from linear procurement and production logic**.

The pilot reports highlight that only a subset of regions were ready to implement deeper business model innovation.

1.11 Policy gaps and inconsistent implementation

Although all countries have national or regional circular economy strategies, several gaps in this aspect persist:

- Strategies often remain high level and **lack operational measures tailored to FCP sectors**.
- **Fragmented responsibility** across ministries complicates implementation.
- **Slow introduction of supportive regulations** (e.g., for compost quality, bio waste collection, EPR reform).

These weaknesses reduce predictability, discouraging SMEs / organisations from investing in circular transformation.

1.12 FCP sector-specific challenges

Food sector

- Food waste prevention remains complex due to food safety and labelling rules, storage issues, and supply chain mismatches.
- Limited access to local processing facilities for side stream valorisation.

Catering sector

- Heavy dependency on disposable materials.
- Limited access to reusable systems or return logistics.

Packaging sector

- Difficulty shifting away from single use plastics.
- Lack of affordable recyclable or bio based alternatives.
- Insufficient recycling capacity for multi material and flexible packaging.

These sector specific obstacles intensify the overall challenge landscape.

The development challenges faced by Central European regions in introducing and upscaling circular economy models in food, catering and packaging sectors are multidimensional and mutually reinforcing. Addressing them requires coordinated action across awareness raising, regulatory clarification, financial mobilisation, ecosystem collaboration, technological innovation, and data driven planning. The approach and strategic directions proposed by CIREVALC partnership are therefore explicitly designed to respond to these barriers through diagnostic support, tailored advisory, skills development, matchmaking, and policy learning activities.

2. SWOT Analysis for the Central Europe FCP Sectors

Table No. 1. SWOT analysis of the FCP sectors in Central Europe from circular economy point of view

Strengths	Weaknesses
Established transnational CIREVALC network enabling knowledge exchange. The tested CIREVALC Accelerator benefits from a well-developed cooperation framework, providing access to diverse expertise, institutional support and comparative learnings. Dedicated involvement from regional institutions ensures strong local anchoring, stakeholder mobilisation and sustained engagement throughout the transition process.	**Limited financial resources for SMEs to implement circular economy solutions.** Although funding mechanisms exist, many SMEs / organisations lack sufficient own resources to adopt circular technologies, redesign processes or develop new business models.
Access to diverse regional and transnational expert pools. Both regional and cross country expert teams, covering technical, legal, operational, financial and sector specific aspects of circularity ensure a high level of advisory quality.	**Low initial awareness and skills among companies and communities.** Low awareness, limited engagement, and knowledge gaps mean that many SMEs begin from a very low baseline, requiring substantial introductory support before advanced circular economy solutions can be explored.
Alignment with EU Circular Economy Action Plan and European Green Deal objectives. The Accelerator's goals are consistent with the overarching EU policy direction, strengthening institutional legitimacy and enabling synergy with European funding instruments.	**Fragmented regulatory frameworks and inconsistent implementation across countries.** Differences in legal interpretation and implementation of circular economy related regulations (EPR, packaging rules, bio-waste management, ESG reporting) create confusion and slow down adoption.

▪ **Comprehensive and structured acceleration methodology (diagnostics → planning → transformation).** The CIREVALC Accelerator provides a consistent operation process based on diagnostic assessments, material flow analyses, circularity audits, tailored roadmaps, legal and financial advisory, and implementation support, which has proven to be effective and replicable across all participating regions and has strong transferability potential. ▪ **Effective combination of individual and group-based learning formats.** The hybrid model (1-on-1 mentoring + thematic workshops, webinars, and networking events) enhances engagements, efficiency of resources to be used, scalability and peer learning among FCP sector stakeholders. Tested model is adaptable to varying levels of pioneer readiness and regional capacity. ▪ **Demonstrated capacity to deliver measurable results.** Pilot actions have generated concrete improvements, such as waste reduction, introduction of reusable and biodegradable packaging, upcycled food products, circular gastronomy prototypes, improved internal procedures, and strengthened local value chain links. These results prove that the Accelerator's operation can significantly contribute to up-taking of circular economy solutions by FCP sectors.	▪ **Dependence on external funding for long-term sustainability.** The Accelerator relies on project based financing, without permanent funding structures, long-term continuity and scaling may be at risk. ▪ **Resource intensive nature of tailored advisory.** High-quality expert based support requires substantial time and financial resources, which may limit the number of SMEs / organisations that can be supported simultaneously. Tight budgets and time constraints may affect the scale of accelerator's operation. ▪ **Limited capacity of SMEs / organisations to implement recommendations.** Despite tailored roadmaps, many SMEs / organisations face constraints related to staffing, time availability and operational pressures, which can delay or reduce the depth of circular solutions implementation. ▪ **Dependence on external experts and fragmented support ecosystem.** Many Central European regions still rely and will rely on outsourced expert pools or umbrella organisations to deliver key Accelarator's operation components. This dependency may lead to inconsistent quality and weak institutionalisation of circular economy capabilities at the regional level.

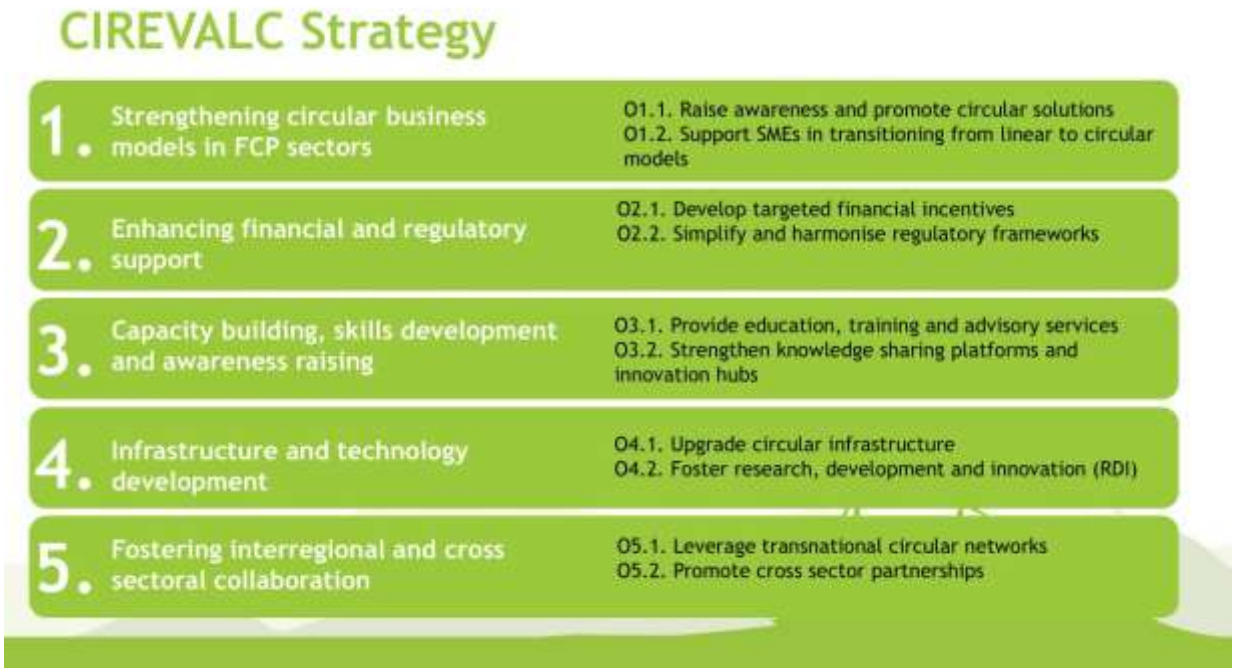
Opportunities	Threats
Growing availability of EU and national funding streams for circular economy initiatives. Both long existing and new programmes, such as Horizon Europe, Interreg, RRF/RRP, ERDF and national circular economy innovation schemes offer substantial financial support for SMEs, NGOs, and local communities transitioning to circularity. This financial landscape can be leveraged to support implementation of activities addressed in the strategy.	**Economic instability reducing SMEs / organisations investment capacity.** Inflationary pressures, economic slowdowns or sector specific shocks may reduce willingness or ability of SMEs / organisations to invest in circular economy solutions.
Increasing consumer demand for sustainable food products, services and packaging. Market trends (consumer awareness and regulatory pressure) indicate rising expectations for environmentally responsible food services, reduced packaging waste and circular product solutions, creating opportunities for early adopters.	**Regulatory complexity and fast evolving EU requirements.** Changing obligations in packaging, waste management, EPR systems, and ESG reporting create uncertainty. SMEs / organisations may delay investments due to unclear or burdensome compliance pathways.
Strong potential for new circular products, business models and innovations. Pilot results show high interest in upcycling, zero-waste gastronomy, circular packaging concepts, product as a service models and new value chains based on bio waste valorisation. Matchmaking between food producers, caterers, and packaging stakeholders can significantly impact strengthening the regional value chains. Further development of local loops such as biowaste valorisation, by product utilisation, shared logistics can significantly amplify regional economic and environmental benefits.	**Uneven implementation of policies and fragmented governance.** National strategies often remain high level without strong enforcement, cross ministerial coordination, or sector specific measures. This creates uncertainty and may reduce long term support for the FCP entities operation scale up.
	Resistance to change in organisations operating under linear models. Some companies remain reluctant to modify established production processes, supply chains or procurement models, slowing the transition.
	Persistent financial barriers and rising operational costs. Even with funding opportunities, SMEs / organisations often face high upfront costs and limited liquidity. Weak financial readiness is identified as a major cross-regional barrier and may hinder the achievement of the long-term results in supporting companies in the FCP sector.
Potential for industrial symbiosis and cross-border collaboration. SMEs, NGOs, local communities can benefit from shared material flows, exchange of by products, shared logistics, and joint	**Market reluctance and slow consumer behaviour change.**

investment in circular economy infrastructure across regions and national borders. ▪ **Advances in digital tools supporting circular transition.** New technologies such as digital waste mapping, LCA software, circular economy data platforms and matchmaking tools enable more efficient identification of circular opportunities.	Although awareness is rising, customer acceptance of reusable systems, upcycled products or packaging alternatives remains inconsistent. Weak market pull may discourage pioneering SMEs / organisations. ▪ **Supply chain disruptions affecting material availability.** Variability in availability of bio based materials, recyclable packaging components or circular economy related technologies may hinder implementation progress. ▪ **Regulatory delays and inconsistencies.** Slow adoption of national circular economy regulations or unclear interpretations of EU directives (e.g., on bio-waste, EPR, recycling standards) create uncertainty for SMEs / organisations. ▪ **Insufficient recycling and biowaste infrastructure in some regions.** Lack of sorting, recycling, composting or industrial symbiosis infrastructure may limit the feasibility of circular business models, especially in rural areas. Lack of technology for testing new solutions, and fragmented waste systems can reduce feasibility of recommended circular actions.

IV. CIRCULAR operation strategic directions and objectives

The transition toward a circular economy in the Food, Catering and Packaging (FCP) sectors requires a coordinated, multi-level approach targeting systemic barriers, operational gaps, financial constraints, and behavioural factors. Insights from the CIREVALC experience clearly highlight the need for integrated strategic pathways that leverage the strengths of the transnational CIREVALC network while addressing the structural weaknesses and threats identified across Central Europe regions.

Drawing from the development challenges and SWOT analysis, the following strategic directions outline how policy makers, public authorities, and business support organisations should guide and mobilise regional and cross-regional stakeholders to upscale circular models in Central Europe's FCP sectors.



Strategic Direction 1: Strengthening circular business models in FCP sectors

Circular transformation in the FCP sectors remains slow due to low awareness, limited expertise, financial barriers, and fragmented value chains. The role of policy makers, public authorities, and business support organisations is therefore to prioritise developing, piloting, and scaling circular business models that demonstrate both economic and environmental benefits.

Objective 1.1 – Raise awareness and promote circular solutions

Many SMEs and communities lack understanding of circular practices such as reuse, recycling, composting, eco-design, and food waste valorisation. The policy makers, public authorities, and business support organisations should therefore work to increase community members awareness by:

- Showcasing practical circular solutions (e.g., reusable and biodegradable packaging, valorisation of food by-products).
- Supporting demonstration activities to highlight economic feasibility, such as reduced waste disposal costs or new revenue streams from upcycled products.
- Promoting early successes and good practices from pilot regions to inspire peer adoption.

Objective 1.2 – Support SMEs in transitioning from linear to circular models

SMEs / organisations require structured and tailored support to redesign operations. To meet this objective the following forms of support should be offered:

- Provide diagnostic tools (circularity audits, waste mapping, material flow analyses) to identify gaps and opportunities.
- Pilot circular economy business models such as product-as-a-service, industrial symbiosis, and upcycling initiatives.
- Facilitate access to expertise through regional, national and transnational expert pools.

By strengthening business models it will be possible to create replicable circular economy pathways that can be scaled across Central Europe.

The successful implementation of this strategic direction relies primarily on stakeholders directly involved in value creation, innovation, and business support within the Food, Catering and Packaging sectors.

The key stakeholders with the greatest influence on the achievement of this goal are:

- SMEs in FCP sectors, which are the main beneficiaries and implementers of circular business models. Their engagement, openness to innovation, and operational capacity determine the actual uptake of circular solutions.
- Business Support Organisations, sectoral agencies and Chambers of Commerce, acting as intermediaries that translate strategic objectives into concrete advisory services, diagnostics and mentoring for SMEs.
- Large enterprises, particularly those playing anchoring roles in supply chains, which can drive demand for circular solutions, set standards, and facilitate market access for SMEs.
- Research institutions and universities, contributing technological know-how, business model innovation, and applied research necessary to test and scale circular solutions.
- Technology providers, supplying tools, equipment and digital solutions enabling eco-design, waste reduction, reuse and material efficiency.

These stakeholders collectively shape the feasibility and scalability of circular business models by combining entrepreneurial action with technical and organisational support.

Strategic Direction 2: Enhancing financial and regulatory support

Financial constraints and regulatory complexity remain two of the strongest barriers to circular economy adoption. SMEs / organisations frequently lack investment capacity, while regulations relating to packaging, bio-waste, EPR, and ESG are inconsistent or difficult to interpret.

Objective 2.1 – Develop targeted financial incentives

The policy makers, public authorities, and business support organisations should therefore advocate for and facilitate:

- Access to grants and subsidies to reduce the cost of circular economy technologies and process innovations.

- Preferential financial instruments (low-interest loans, guarantees, micro-credits) to encourage circular investments.
- Support for SMEs / organisations in identifying suitable funding calls and preparing applications through tailored financial advisory services.

Objective 2.2 – Simplify and harmonise regulatory frameworks

A major obstacle identified in all Central European regions is regulatory fragmentation, therefore the Accelerator operation will be also focused on:

- Encouraging the alignment of national circular economy related legislation with EU directives.
- Supporting SMEs/ organisations through legal clarification workshops and advisory services that help to interpret complex requirements (packaging rules, waste classification, ESG reporting).
- Advocating for reducing administrative burdens by promoting streamlined reporting tools and clearer compliance guidelines.

Improved regulatory environments will accelerate investment readiness and lower the barrier to circular economy implementation.

This strategic direction depends strongly on stakeholders operating within the policy, financial and regulatory environment, as their actions directly influence investment conditions and compliance feasibility for SMEs.

The key stakeholders with the greatest influence on the achievement of this goal are:

- Policy makers at national and regional levels, responsible for defining, updating and harmonising regulatory frameworks, incentives and support instruments aligned with EU circular economy objectives.
- Public authorities, providing access to funding programmes, public infrastructure, procurement mechanisms and regulatory interpretation.
- Financial institutions, which play a crucial role in offering grants, loans, guarantees and green financing instruments tailored to circular economy investments.
- Business Support Organisations, supporting SMEs in navigating funding schemes, preparing applications and understanding regulatory requirements.
- NGOs and environmental associations, which contribute expertise on regulatory impacts, sustainability standards and policy advocacy.

The coordinated engagement of these stakeholders is essential to lower financial risks, reduce administrative burdens and improve investment readiness for circular transition.

Strategic Direction 3: Capacity building, skills development and awareness raising

Low awareness and insufficient skills represent foundational barriers to circular transformation. Strengthening human capital is central mission of the CIREVALC strategy.

Objective 3.1 – Provide education, training and advisory services

The key area of operation is to expand capacity building activities to equip SMEs / organisations and communities with practical circular economy knowledge through:

- Thematic workshops, webinars, and peer-learning events addressing circular economy models, sustainability legislation, carbon foot printing, LCA, and sustainable packaging.
- Tailored 1 on 1 advisory services that guide SMEs / organisations through operational and strategic circular economy changes.
- Awareness campaigns targeting local communities to encourage behavioural change and circular consumption patterns.

Objective 3.2 – Strengthen knowledge sharing platforms and innovation hubs

To foster circular economy ecosystems, the focus should be on:

- Cooperation with regional incubators and innovation hubs already active in FCP sectors.
- Developing transnational knowledge sharing platforms to disseminate best practices, tools and success stories.
- Mobilise regional working groups to maintain stakeholder engagement after project completion.

This strategic direction will ensure that all actors, from SMEs to public institutions, will be equipped with the competencies required for circular economy transition.

Furthermore, this strategic direction and the related objectives are supported by the CIREVALC Circular Community Accelerator, the solution jointly developed in the CIREVALC project as a long-term catalyst for systemic circular transformation in the FCP sectors across Central Europe. In addition to that, solutions alike the CIREVALC accelerator can facilitate the implementation of this strategic direction to a great extent.

The success of capacity-building activities depends on stakeholders responsible for knowledge generation, dissemination, and behavioural change at both business and community levels.

The key stakeholders with the greatest influence on the achievement of this goal are:

- Business Support Organisations and Chambers of Commerce, delivering training, workshops, mentoring and awareness-raising campaigns tailored to SMEs' needs.
- Research institutions and universities, providing educational content, up-to-date expertise and methodological support for training programmes.
- SMEs and large enterprises, acting both as learners and as sources of good practices, case studies and peer-learning examples.
- NGOs and environmental organisations, supporting awareness-building, community engagement and sustainability communication.
- Media and communication agencies, amplifying outreach, disseminating success stories and improving public understanding of circular economy benefits.

Together, these stakeholders contribute to building long-term human capital, fostering a learning culture and encouraging behavioural change necessary for circular economy adoption.

Strategic Direction 4: Infrastructure and technology development

Insufficient waste management, material recovery and recycling infrastructure especially for bio-waste and complex packaging hinders the practical implementation of circular economy models. Technology gaps are also common among SMEs / organisations.

Objective 4.1 – Upgrade circular infrastructure

The main area of operation should be supporting regional efforts to:

- Improve waste sorting, separate bio-waste collection, composting and recycling facilities.
- Expand material recovery systems for packaging and food processing.
- Promote infrastructure investments in regions lagging behind due to outdated or insufficient systems.

Objective 4.2 – Foster research, development and innovation (RDI)

Research, development and innovation is essential for developing advanced circular economy solutions. This strategic direction aims to remove structural bottlenecks that prevent scaling of circular models through the following activities:

- Support the development of new eco design approaches for packaging, circular food production technologies, and digital circular economy tools.
- Facilitate cross-regional technology partnerships through the CIREVALC network.
- Encourage SMEs to test new technologies through pilots and demonstration projects.

This strategic direction is highly dependent on stakeholders responsible for technological innovation, infrastructure provision, and applied research.

The key stakeholders with the greatest influence on the achievement of this goal are:

- Public authorities, which influence infrastructure investment decisions related to waste management, recycling, biowaste processing and testing facilities.
- Technology providers, supplying innovative solutions for recycling, eco-design, material tracking and production optimisation.
- Research institutions and universities, offering testing environments, pilot infrastructures and R&D support.
- Waste management companies, enabling material recovery, reuse loops and industrial symbiosis solutions.
- Financial institutions, supporting investments in infrastructure and technology through dedicated financial instruments.

Their coordinated involvement determines the practical feasibility of closing material loops and scaling circular solutions across regions.

Strategic Direction 5: Fostering interregional and cross-sectoral collaboration

Circularity in FCP sectors requires collaboration across industries, regions and countries. The CIREVALC Accelerator network and similar networks provide suitable platform for such cooperation.

Objective 5.1 – Leverage transnational circular networks

The CIREVALC Accelerator Network and other transnational circular networks offer unique opportunities for knowledge exchange and harmonization of practices on transnational level, which include:

- Strengthening the knowledge transfer among regions, that enable replication of successful practices and harmonisation of approaches.
- Scaling up actions by promoting cross-border collaboration among SMEs / organisations, public authorities and R&D institutions.
- Facilitating matchmaking for industrial symbiosis and circular economy partnerships across Central Europe.

Objective 5.2 – Promote cross-sector partnerships

Collaboration between food producers, caterers, packaging manufacturers, recyclers and local authorities is critical. To stimulate this process the following measures should be taken:

- Offering platform for joint problem solving, resource sharing, and co-creation of new initiatives.
- Facilitating integrated value chain initiatives that reduce waste and enable circular flows of materials.
- Connecting SMEs / organisations with education and innovation centres to bridge knowledge and technology gaps.

Strengthened cooperation will generate systemic benefits, accelerate learning and enable long term resilience of circular ecosystems.

This strategic direction relies on broad partnership networks capable of connecting sectors, regions and governance levels.

The key stakeholders with the greatest influence on the achievement of this goal are:

- Transnational and regional public authorities, creating frameworks for cooperation and supporting cross-border initiatives.
- Business Support Organisations and regional development agencies, acting as coordinators of networks, matchmaking platforms and joint initiatives.
- SMEs and large enterprises, participating in industrial symbiosis partnerships, cross-sector pilots and shared value-chain solutions.
- Research institutions and innovation hubs, facilitating knowledge exchange, joint R&D projects and technology transfer.
- NGOs and civil society organisations, supporting collaboration, trust-building and inclusive stakeholder engagement.
- Media and communication agencies, enhancing visibility of cross-regional cooperation outcomes and best practices.

Effective collaboration among these stakeholders enables replication of successful models, bridges regional disparities and strengthens the overall resilience of circular ecosystems in Central Europe.

To sum up, identified CIREVALC strategic directions aim to:

- **Accelerate the adoption of circular business models.**
- **Build strong and stable financial and regulatory conditions.**
- **Develop skills, awareness and human capacity.**

- **Strengthen infrastructure and technological readiness.**
- **Foster collaboration across sectors and regions.**

Together, these strategic directions and objectives provide a comprehensive, multi-dimensional roadmap to upscale circular economy models in the FCP sectors across Central Europe regions.

V. Bottlenecks, feasibility and risk factors of strategy implementation

1. Introduction and overview

The successful implementation of the CIREVALC Strategy depends not only on the quality of the designed activities and strategic directions but also on the ability of regional, national, and transnational actors to effectively manage operational, financial, regulatory, and behavioural risks. Although the strategy introduces a coherent framework for advisory support, skills development, pilot actions, technology testing and cross-regional cooperation, its feasibility may be affected by external and internal bottlenecks that require continuous monitoring and flexible responses.

Drawing on insights from regional analyses, pilot implementation reports, and the Accelerator Guide, it is evident that circular economy transformation in the Food, Catering and Packaging (FCP) sectors is shaped by several structural barriers. These include limited awareness, fragmented regulations, financial constraints, insufficient technical capacity, and ecosystem misalignments, all of which may impact the speed and scope of Strategy implementation.

Therefore, the identification of bottlenecks and feasibility risks is essential for ensuring that the CIREVALC Strategy remains adaptable, resilient, and capable of delivering the intended strategic outcomes across Central Europe. The following sections present key risk areas, their potential impacts, and proposed corrective actions designed to mitigate their effects.

2. Bottlenecks, feasibility constraints and risk factors

The table below provides a structured summary of the main bottlenecks and risk factors that may influence the implementation of the strategy. Each risk has been identified on the basis of evidence from the pilot activities, regional diagnostics, and strategic analysis.

Table No. 2. Bottlenecks, feasibility and risk factors of strategy implementation

No.	Identified bottlenecks and challenges	Potential risk factors	Probability and impact	Corrective actions / mitigation measures
1	Engaging SMEs and target groups in the Accelerator's services, events, and tools	▪ Low awareness of circular economy benefits and obligations among SMEs. ▪ Limited time, staff, or interest to participate in advisory, training, pilots or networking activities. ▪ Perceived complexity of circular economy concepts and "initiative fatigue" from multiple support programmes.	High probability / High impact	▪ Strong information and outreach campaigns using local multipliers, sector associations, and CIREVALC network channels. ▪ Adjusting delivery formats (shorter sessions, hybrid formats, on site advisory). ▪ Using inspiring local case studies and testimonials. ▪ Offering highly practical and easy to apply tools / solutions.

2	Securing adequate financial resources for implementation of circular economy actions	▪ Limited budgets of regional operators to deliver expert level advisory and events. ▪ SMEs' limited investment capability for circular economy solutions. ▪ Challenges in accessing national/EU funds due to administrative burden or co-financing requirements.	Medium probability / High impact	▪ Building long term partnerships with regional institutions to share costs. ▪ Using expert pools like those of CIREVALC and joint events to reduce duplication. ▪ Providing financial advisory and support in grant preparation. ▪ Advocating for dedicated circular economy support schemes at regional/national level.
3	Ensuring engagement of experienced stakeholders and experts	▪ Limited availability of national/regional circular economy experts. ▪ High cost of specialised expertise (e.g., packaging technology, LCA). ▪ Competing demand for experts in parallel circular economy related initiatives.	Medium probability / High impact	▪ Strengthening transnational expert exchange within CIREVALC and beyond. ▪ Encouraging regional partnerships with universities and innovation hubs. ▪ Co-developing materials and tools that reduce expert time required.
4	Regulatory complexity and uncertainty affecting feasibility of circular economy actions	▪ Rapidly evolving EU and national circular economy regulations (e.g., packaging, EPR, ESG). ▪ Ambiguous compliance pathways for SMEs. ▪ Time consuming legal clarifications required during implementation.	High probability / Medium-high impact	▪ Regular legal update sessions with expert pools. ▪ Clear guidelines and simplified compliance instructions. ▪ Cooperation with public authorities to harmonise interpretations.
5	Linguistic and communication barriers in cross-regional cooperation	▪ Limited English proficiency among SMEs or municipal stakeholders. ▪ Difficulty using technical circular economy vocabulary. ▪ Reduced ability to fully benefit from transnational advisory and events.	Medium probability / Medium-high impact	▪ Preparing tools, materials and summaries in national languages. ▪ Providing translation / interpretation during events. ▪ Offering bilingual versions of key templates and diagnostics.
6	Technical and infrastructural gaps in FCP sectors	▪ Insufficient recycling/biowaste capacity in some regions.	Medium probability / High impact	▪ Leveraging regional RDI institutions to support testing and prototyping.

		▪ Limited access to local facilities for prototype or packaging testing. ▪ High cost of technological upgrades for SMEs.		▪ Prioritising low cost, high impact circular economy interventions first. ▪ Advocating infrastructure investments in regional circular economy strategies / documents.
7	Operational barriers inside SMEs	▪ Lack of staff capacity to implement circular economy actions. ▪ Difficulty integrating circular economy into daily operations. ▪ Limited digitalisation or absence of monitoring tools.	High probability / Medium impact	▪ Step by step implementation roadmaps tailored to SME capacity. ▪ Simple monitoring checklists and low tech solutions. ▪ On site mentoring to support operational integration.
8	Fragmented value chains and weak collaboration culture	▪ Lack of trust or cooperation among FCP actors. ▪ Limited experience in industrial symbiosis partnerships. ▪ Competition sensitive industries reluctant to share data or waste streams.	Medium probability / Medium-high impact	▪ Facilitated matchmaking and moderated cooperation sessions. ▪ Use of anonymised data and neutral facilitators. ▪ Promotion of successful cross sector pilots as inspiration.
9	Variability in regional maturity levels across Central Europe	▪ Some regions have advanced circular economy ecosystems, others lag behind. ▪ Uneven availability of skills, experts, and supportive policies. ▪ Diverse starting points complicate harmonisation of cooperation.	Medium probability / Medium impact	▪ Flexible implementation model for each regional Accelerator with adaptable service intensity. ▪ Peer learning between advanced and lagging regions. ▪ Cross-regional mentoring (accelerator to accelerator support).
10	Risk of insufficient long term institutionalisation	▪ Dependence on projects based financing. ▪ Lack of permanent structures supporting circular economy advisory. ▪ Risk that cooperation networks weaken over time.	Medium probability / High impact	▪ Embedding Accelerator functions into regional development institutions. ▪ Formalising long term cooperation agreements. ▪ Developing post project funding plans and circular economy community hubs.

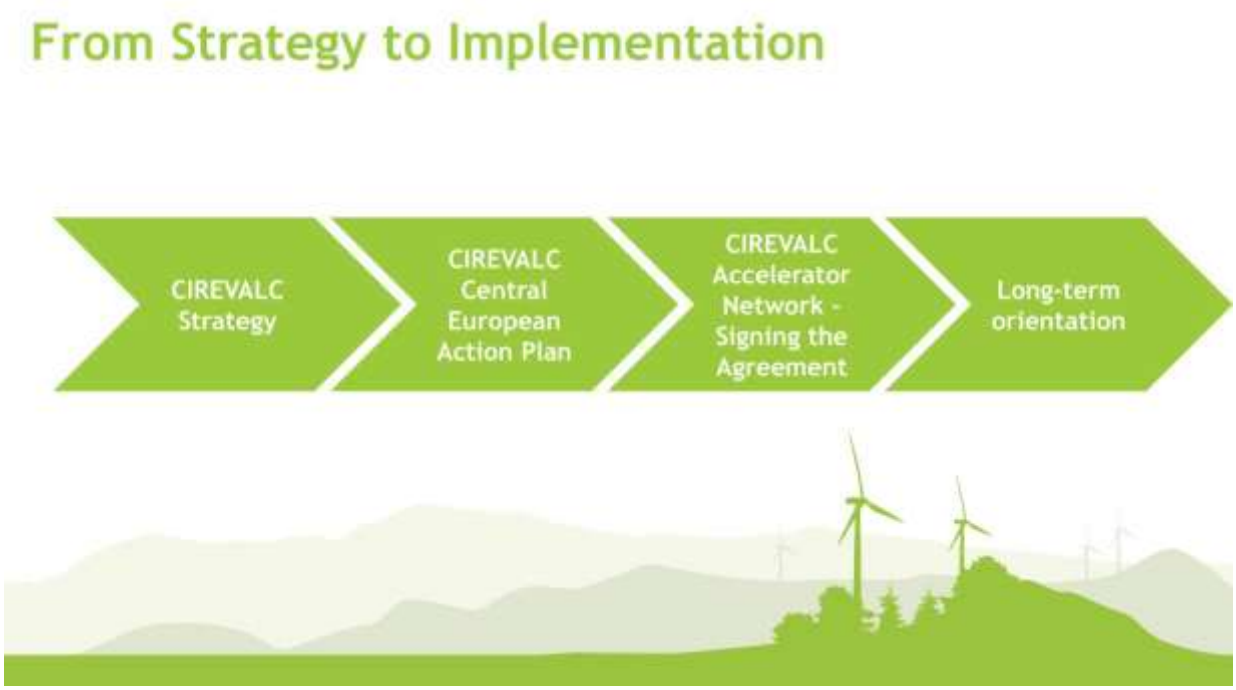
The feasibility of the CIREVALC strategy depends on the ability to manage behavioural, financial, regulatory, and systemic risks that may influence the pace and quality of implementation. Most risks identified are manageable, provided that corrective actions are integrated into the day to day operations of regional Accelerators. Continuous monitoring, flexible adaptation, and strong

collaboration across regions will be essential to maintaining the strategy's long term relevance and effectiveness.

VI. Next steps - from strategy to implementation

The CIREVALC Strategy constitutes a common strategic framework for introducing and upscaling circular economy models in the Food, Catering and Packaging (FCP) sectors across Central Europe. Its added value lies not only in identifying development challenges and defining strategic directions, but also in providing a clear pathway towards implementation, cooperation and long-term institutionalisation.

The next steps mark the transition from a strategic document to an operational, transnational system of action, ensuring that the Strategy's objectives are translated into concrete measures, governance structures and sustained cooperation mechanisms. These next steps build directly on the results of the CIREVALC project activities, pilot implementation of the Circular Community Accelerator, and the commitment of project partners and associated stakeholders.



1. Development and implementation of the CIREVALC Central Europe Level Action Plan

A key next step following the adoption of the CIREVALC Strategy is the preparation and implementation of the CIREVALC Central Europe Level Action Plan that will operationalise the Strategy at transnational level by translating strategic directions and recommendations into coordinated actions that address shared challenges across Central European regions.

The Central Europe Level Action Plan will:

- define joint priorities and actions relevant beyond individual regions;
- ensure alignment and complementarity with regional action plans developed by project partners;
- support replication and upscaling of effective circular solutions tested within the CIREVALC Circular Community Accelerator;

- strengthen policy learning and cooperation between regions, national authorities and European-level stakeholders.

The Action Plan will focus on areas where transnational cooperation brings clear added value, such as knowledge exchange, harmonisation of support instruments, cross-regional pilot scaling, policy coordination and interregional networking. Its implementation will begin already during the project lifetime and will continue beyond it, forming a bridge between project-based activities and longer-term circular economy support mechanisms in Central Europe.

2. Establishment of the CIREVALC Accelerator Network

To ensure durability and continuity of results, the Strategy foresees the maintaining and strengthening the CIREVALC Accelerator Network as a permanent cooperation platform linking regional Circular Community Accelerators, business support organisations, public authorities, research institutions and other relevant ecosystem actors.

The Network will serve also after closing implementation of the CIREVALC project as:

- a framework for ongoing cooperation and knowledge exchange on circular economy acceleration in FCP sectors,
- a platform for scaling and transferring the CIREVALC Circular Community Accelerator model to new regions and organisations,
- a community of practice supporting continuous improvement of tools, methodologies and advisory services,
- a vehicle for joint initiatives, policy dialogue and future project development.

The CIREVALC Accelerator Network was built on the relationships, working groups and communities established during the project and will remain open to new members from Central Europe and beyond who share the Strategy's objectives.

3. Signing of the CIREVALC Accelerator Agreement

A formal step supporting the long-term operation of the Network will be the signing of the CIREVALC Accelerator Agreement by project partners and interested organisations. This agreement will define the principles, roles and modalities of cooperation within the CIREVALC Accelerator Network.

The Agreement will outline:

- the scope and objectives of the Network,
- commitments of the signing parties regarding cooperation, knowledge sharing and promotion of circular economy acceleration,
- governance and coordination mechanisms,
- provisions for the continued use and development of shared tools, including the Circular Community Accelerator blueprint, mapping tool and online marketplace,
- a framework for future expansion of the Network and inclusion of new members.

By formalising cooperation, the CIREVALC Accelerator Agreement will provide predictability, transparency and institutional anchoring for post-project collaboration.

4. Long term orientation

Through the combined implementation of the Central Europe Level Action Plan, the establishment of the CIREVALC Accelerator Network and the signing of the CIREVALC Accelerator Agreement, the Strategy moves beyond a project-based approach towards a long-term, cooperative system supporting circular transformation in the FCP sectors.

These next steps ensure that CIREVALC goals and network function as a lasting catalyst for innovation, collaboration and policy learning, contributing to more competitive, resource-efficient and resilient regional economies across Central Europe.

VII. Table of Figures

VIII. Annexes

Annex No. 1. D311 - Blueprint of the CIREVALC Circular Community Accelerator (in separate document)

Annex No. 2. D312 - Standardised financial plan for a Circular Community Accelerator (in separate document)