

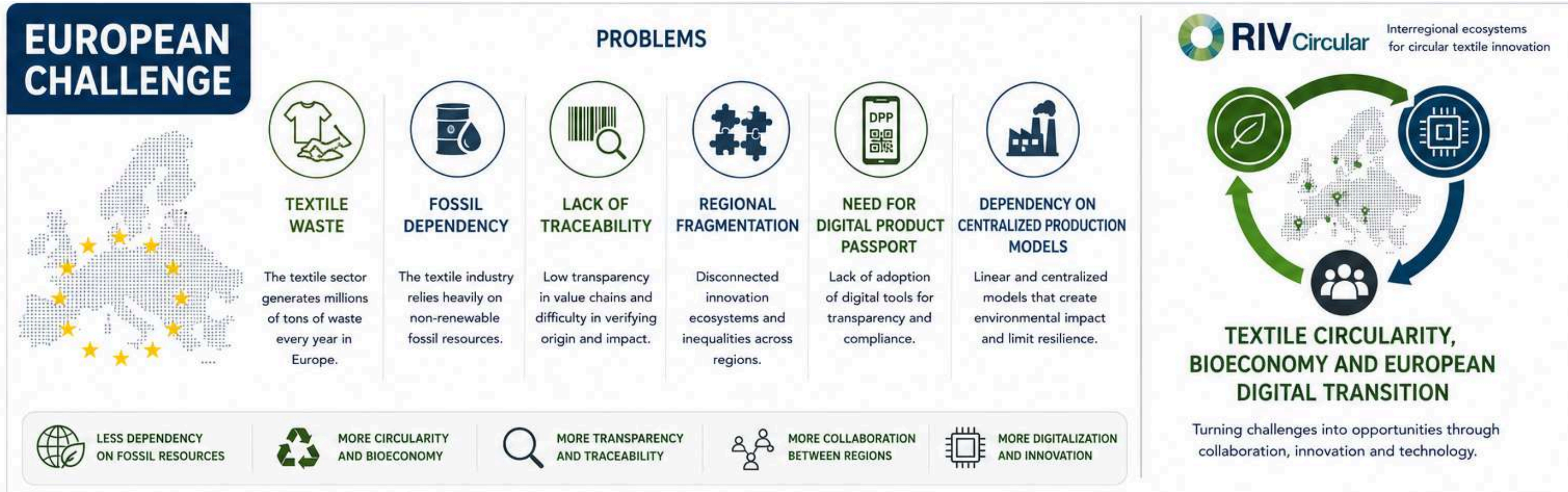
EUROPEAN CIRCULAR TEXTILE ECOSYSTEM

Regional distributed ecosystems for circular textile innovation

RIVCircular proposes a distributed European ecosystem that connects biomaterials, regional bioeconomy, digital traceability, SMEs, creative industries and territorial deployment through interoperable circular innovation ecosystems.

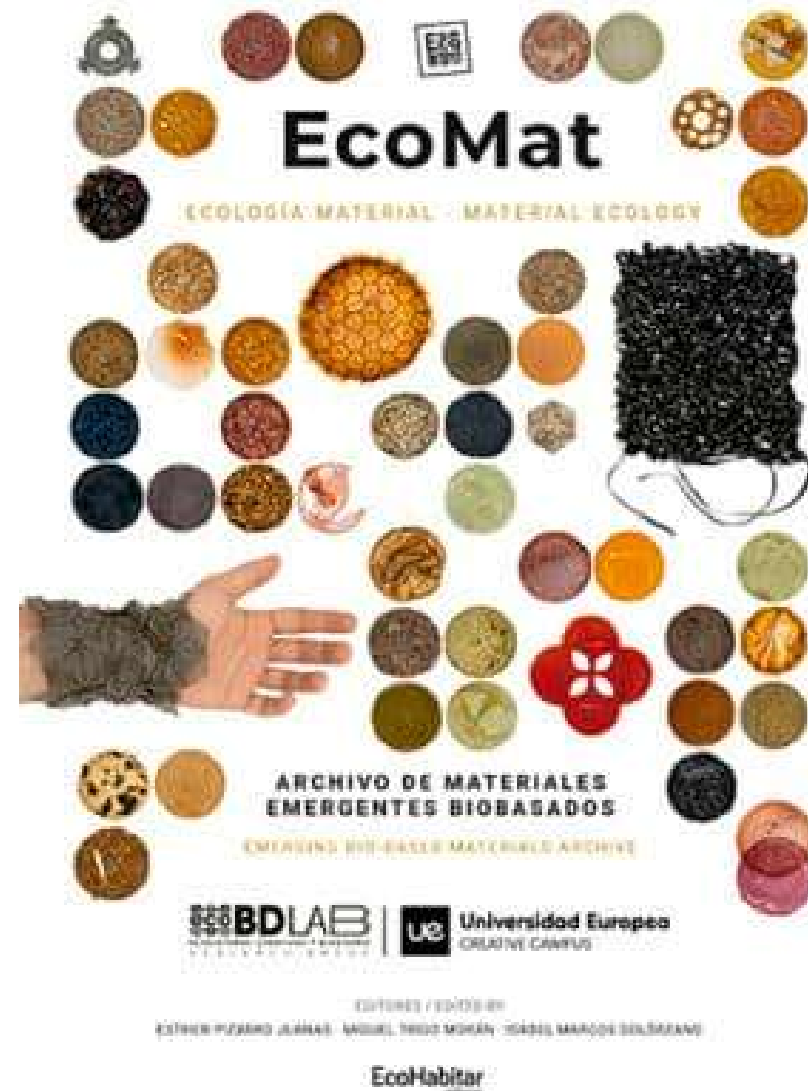
“Interregional ecosystems for circular textile innovation based on biomaterials, zero waste design and digital traceability”

RIVCircular – Topic 4: Circular economy in the textile industry



PROJECT VISION

Circular Textile Innovation Ecosystems



Connecting:

- bioeconomy
- circular innovation
- biomaterials
- digital traceability
- territorial cooperation
- distributed validation ecosystems
- applied creativity and circular innovation
- territorial deployment
- regional scalability

DISTRIBUTED BIOMATERIALS AND REGIONAL BIOECONOMY

Connecting distributed regional ecosystems for circular textile innovation



Connecting:

- biomaterials
- regional bioeconomy
- digital traceability
- SMEs
- interoperability
- retail pilots
- territorial deployment

THE 5R FRAMEWORK

Circular Design Principles



REFUSE
Avoid unnecessary production and waste

REDUCE
Optimise materials and resources

REUSE
Extend product life cycles

RECYCLE
Reintegrate materials into production

REGENERATE
Restore environmental and territorial ecosystems

DISTRIBUTED BIOMATERIALS AND REGIONAL BIOECONOMY

New infrastructure biomaterials systems connected to local biomass valorization and regional deployment.



SUSTAINABLE
RAW MATERIALS



CIRCULAR
TRANSFORMATION



INNOVATION &
CUSTOMISATION



REGIONAL VALUE
CREATION



MARKET &
SOCIAL IMPACT

CIRCULAR DESIGN & ZERO WASTE METHODOLOGIES



Core Elements

- Zero Waste Fashion
- minimal waste systems
- modular design
- regenerative creativity
- material optimisation
- scalable circular design

DIGITAL PRODUCT PASSPORT & TRACEABILITY

Digital circular ecosystem



Components

- Digital Product Passport (DPP)
- blockchain interoperable
- ESG traceability
- FAIR Data
- interoperable systems
- QR traceability
- environmental data
- digital governance
- distributed data ecosystems

DISTRIBUTED MARKET VALIDATION ECOSYSTEMS

Connection with SMEs, Retail, Regional Ecosystems and Market Adoption

CONTRIBUTIONS

- distributed pilot ecosystems
- SME integration
- regional market deployment
- biomaterial validation
- retail experimentation
- circular business integration
- territorial scalability
- interoperable market adoption



Validation through distributed regional ecosystems connected to SMEs, creative industries and circular retail environments.

EXPERIENCE & DEVELOPED PILOTS

Previous Experience and Circular Design Pilots



BLOCK 01

University training in Zero Waste Fashion

BLOCK 02

Textile recycling and fibre recovery pilot

BLOCK 03

Circular accessories using Piñatex

BLOCK 04

Minimal Waste accessories

BLOCK 05

Research in biomaterials and sustainable leather

DEVELOPED PILOT CASES

Pilot Cases and Previous Validation Experiences



PILOT 01

Textile recycling and fibre recovery

PILOT 02

Circular accessories using Piñatex

PILOT 03

Fanny Packs Collection

PILOT 04

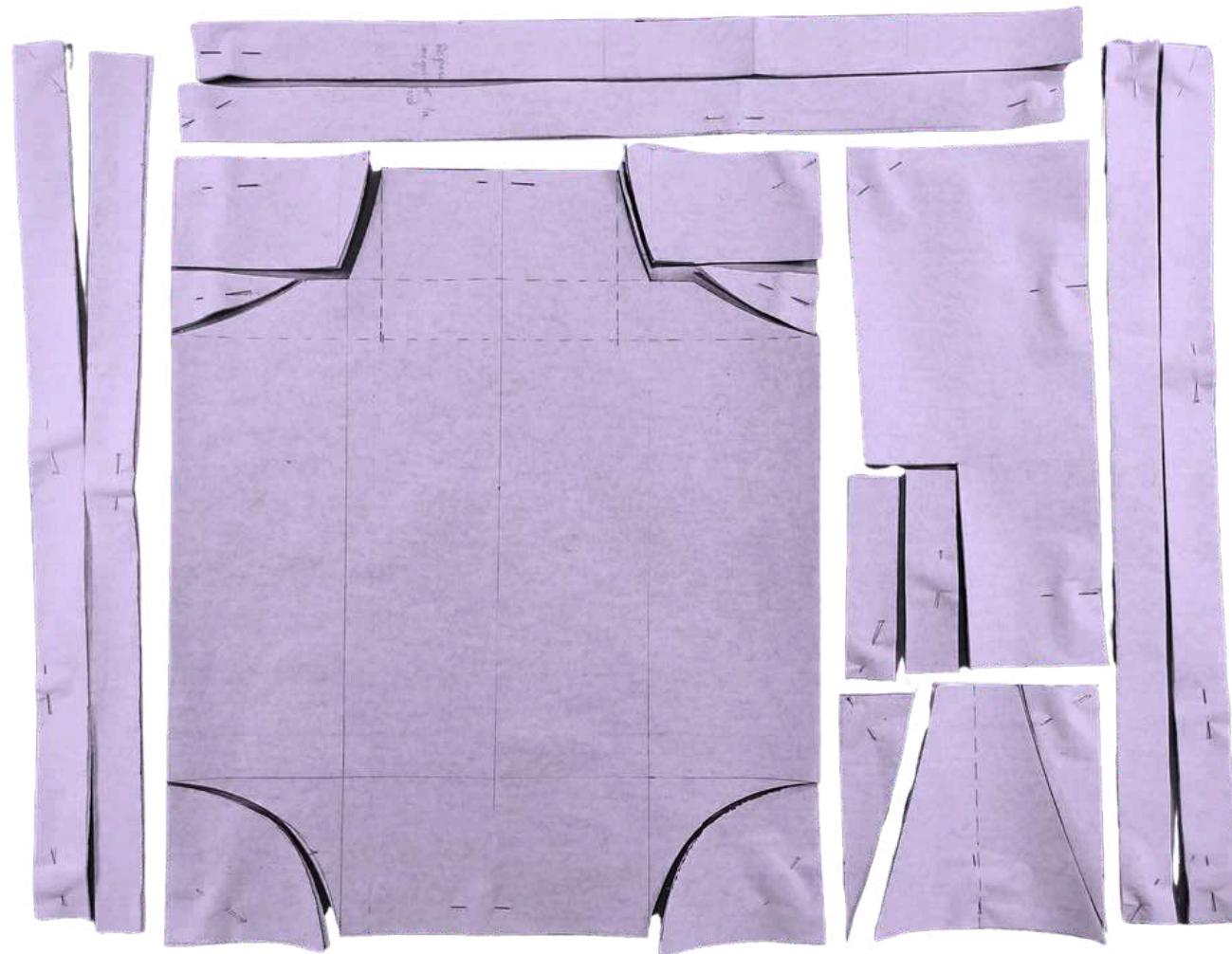
Minimal Waste Accessories

PILOT 05

Educational implementation in sustainability

FUTURE EUROPEAN DEMONSTRATORS & PILOTS

Future European Pilots



PILOT 01

Bio-based biomaterials and circular accessories

PILOT 02

Digital Product Passport and QR traceability

PILOT 03

Distributed validation and TRL testing

PILOT 04

Circular design and zero waste certification

PILOT 05

Collaborative commercialisation platforms

PILOT 06

Regional workshops and territorial deployment

PILOT 07

Fashion film and international dissemination

ECOMMERCE & MARKET VALIDATION

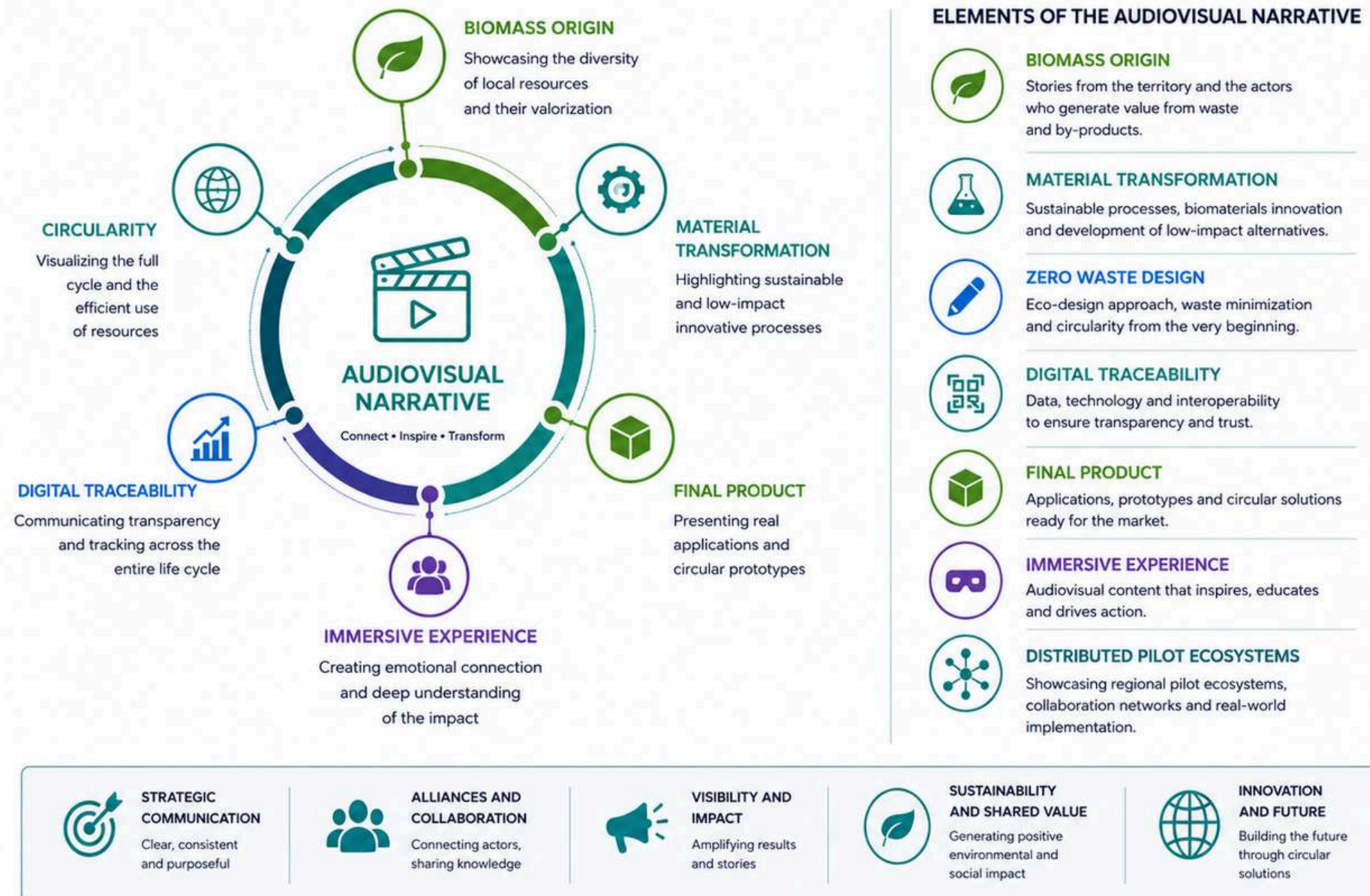
Commercial Validation and Market Experimentation

OBJECTIVES

collaborative commercialisation platforms
user validation
commercial validation
market adoption and territorial deployment
biomaterial acceptance
traceability and circular communication

Audiovisual narrative of the circular ecosystem

Communicating the value, impact and innovation of the ecosystem



• Elements

- Biomass origin
- Material transformation
- Zero Waste design
- Prototyping
- Digital traceability
- Final product
- Circularity
- Immersive experience
- Circular communication
- Diffusion ecosystem
- Market awareness

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Topic 4: Circular economy in the textile industry

INTERNATIONAL DISSEMINATION AND MARKET VALIDATION

European visibility of circular innovation and acceleration towards global markets



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INTERNATIONAL PLATFORMS FOR VISIBILITY AND VALIDATION

Showcasing circular and biomaterial innovations on global stages



GLOBAL VISIBILITY
LOCAL IMPACT



BIOMATERIALS DEMONSTRATORS

Real-world applications of next-generation biomaterials in textiles and design.



CIRCULAR INNOVATION SHOWCASES

Presenting circular solutions that redefine value chains.



SUSTAINABILITY EXHIBITIONS

Leading sustainability events that drive awareness and collaboration.



INTERNATIONAL SHOWCASES

Global platforms to connect, inspire and validate innovations.



CULTURAL INNOVATION

Incorporating heritage, creativity and design to generate meaning and impact.



CREATIVE BIOECONOMY

Driving a regenerative economy through creativity, science and nature-based solutions.

KEY INTERNATIONAL PLATFORMS



MADRID DESIGN FESTIVAL



Leading design event in Europe connecting creativity, innovation and sustainable solutions.

LONDON FASHION WEEK

LONDON FASHION WEEK



Global fashion platform showcasing responsible innovation and the future of textiles.

EUROPEAN EXHIBITIONS



Participation in key European fairs and exhibitions focused on sustainability, materials and circular economy.

INTERNATIONAL SHOWCASES



High-impact international events to validate solutions, build networks and open new markets.

IMPACT AND VALUE



GLOBAL VISIBILITY

Increase recognition of circular textile innovations on international stages.



STRATEGIC CONNECTIONS

Build alliances with brands, institutions, investors and innovation leaders.



MARKET VALIDATION

Validate solutions with diverse audiences and real-world feedback.



SUSTAINABLE IMPACT

Accelerate the transition to a regenerative and circular textile industry.

FROM INNOVATION TO GLOBAL IMPACT



RESEARCH & DEVELOPMENT



BIOMATERIAL & CIRCULAR SOLUTIONS



INTERNATIONAL VISIBILITY



VALIDATION & RECOGNITION



GLOBAL IMPACT & SCALE



6+
CONTINENTS
Global reach



20+
INTERNATIONAL EVENTS
Participation per year



50+
STRATEGIC PARTNERS
Institutions, brands, clusters and media



15+
CONFERENCES & TALKS
Sharing knowledge and inspiring change



100K+
AUDIENCE REACH
Physical, digital and media impact



INNOVATION COLLABORATION
SUSTAINABILITY
A shared global vision

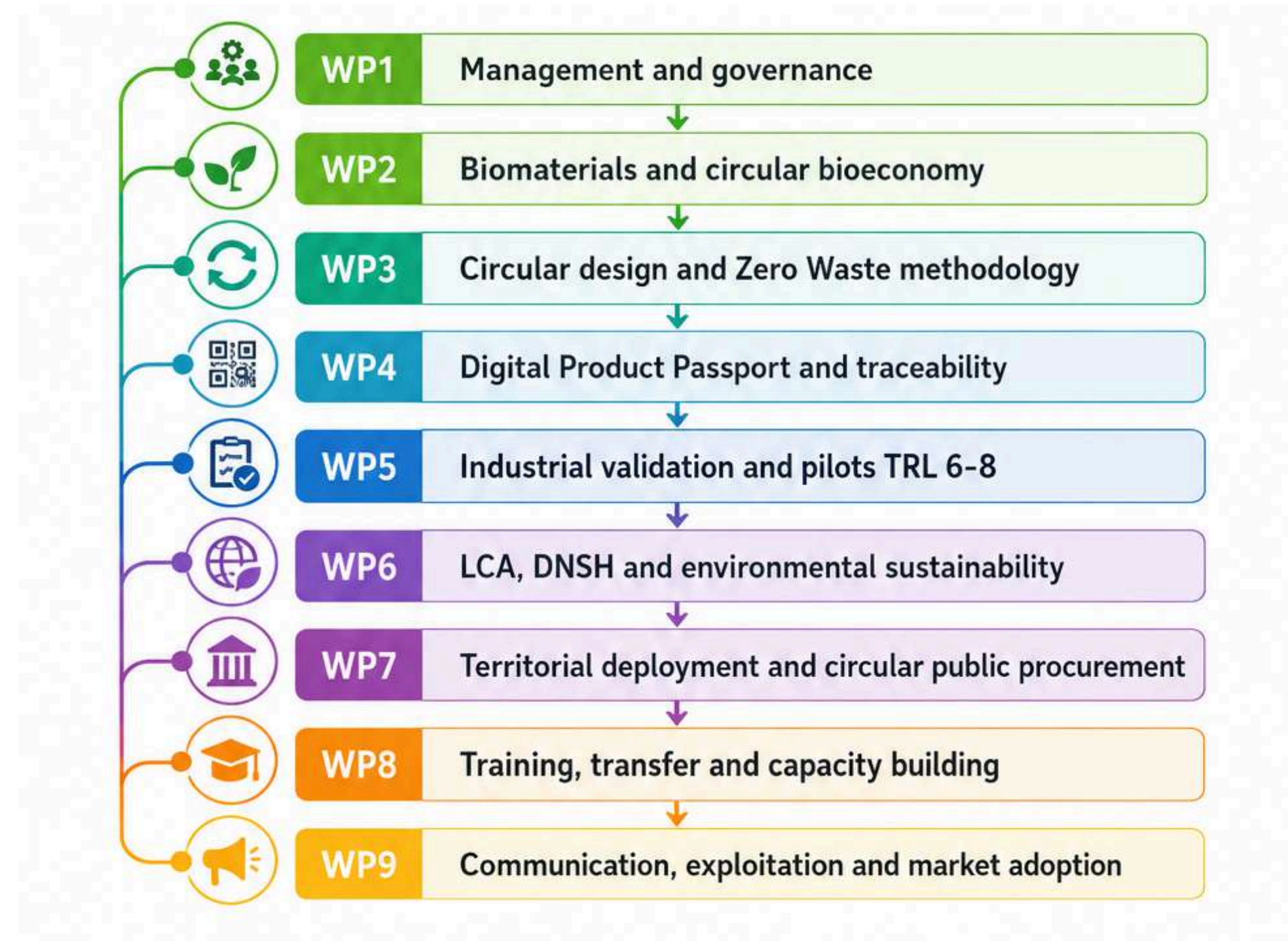
CAPACITY BUILDING & CIRCULAR TRANSITION

Specialised Training, Knowledge Transfer and Green Skills



- circular design methodologies
- green skills
- Digital Product Passport (DPP)
- bioeconomy training
- circular textile competencies

EUROPEAN ARCHITECTURE OF DEPLOYMENT



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ROLE OF THE EUROPEAN UNIVERSITY OF MADRID

Academic and Strategic Coordinator



KEY AREAS

- academic leadership
- educational innovation
- applied research
- biomaterials
- sustainability
- digitalisation
- university-industry collaboration
- internationalisation

Circular creative innovation and market deployment

Creamodite as an Applied Creative Innovation Lab

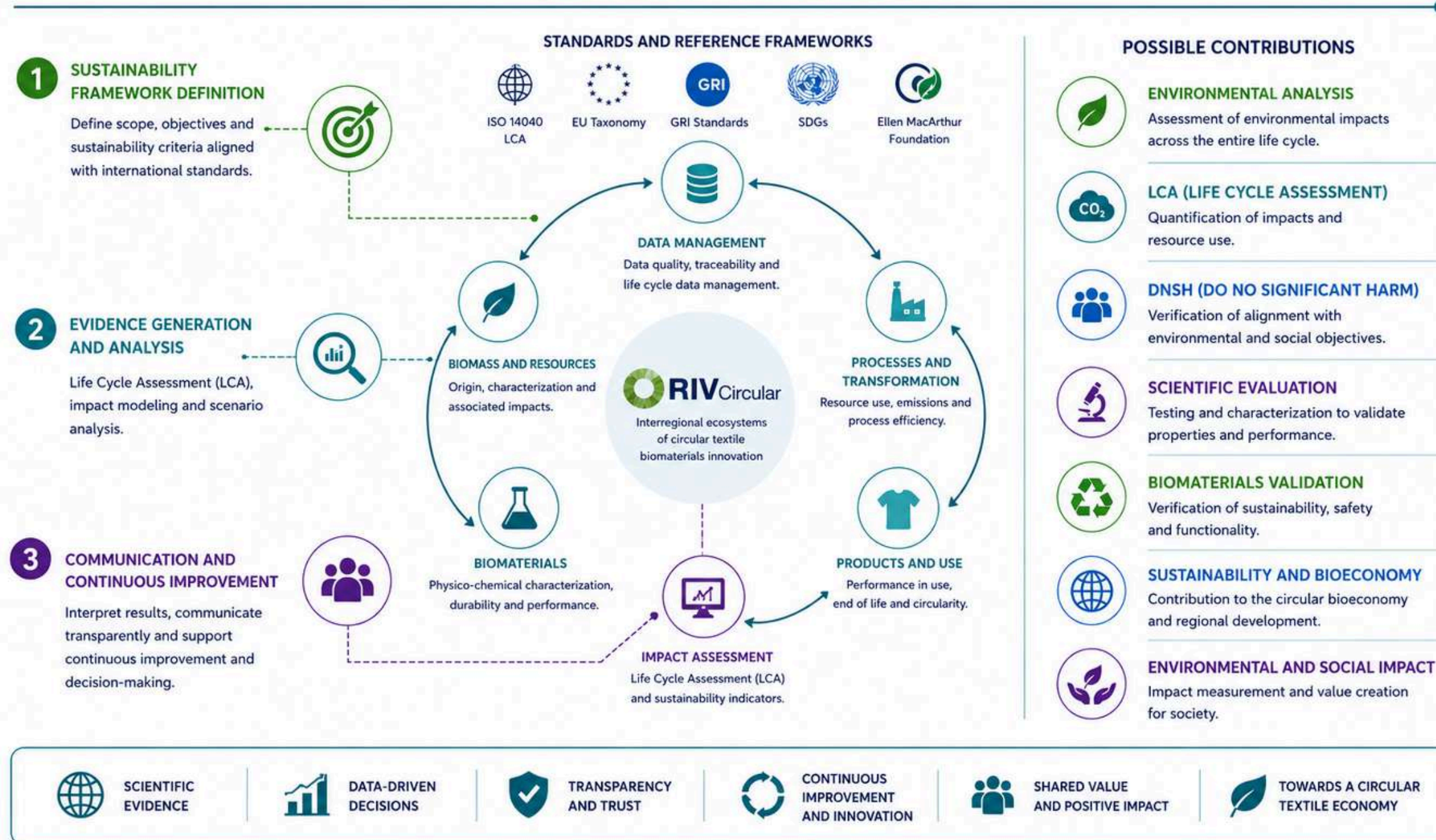
CONTRIBUTIONS

- Zero Waste Fashion methodology
- creative pilots
- capacity building
- international dissemination
- market validation
- applied innovation



SCIENTIFIC VALIDATION OF SUSTAINABILITY

Evidence, data and methodologies to measure the environmental, social and economic impact of circular textile biomaterials.

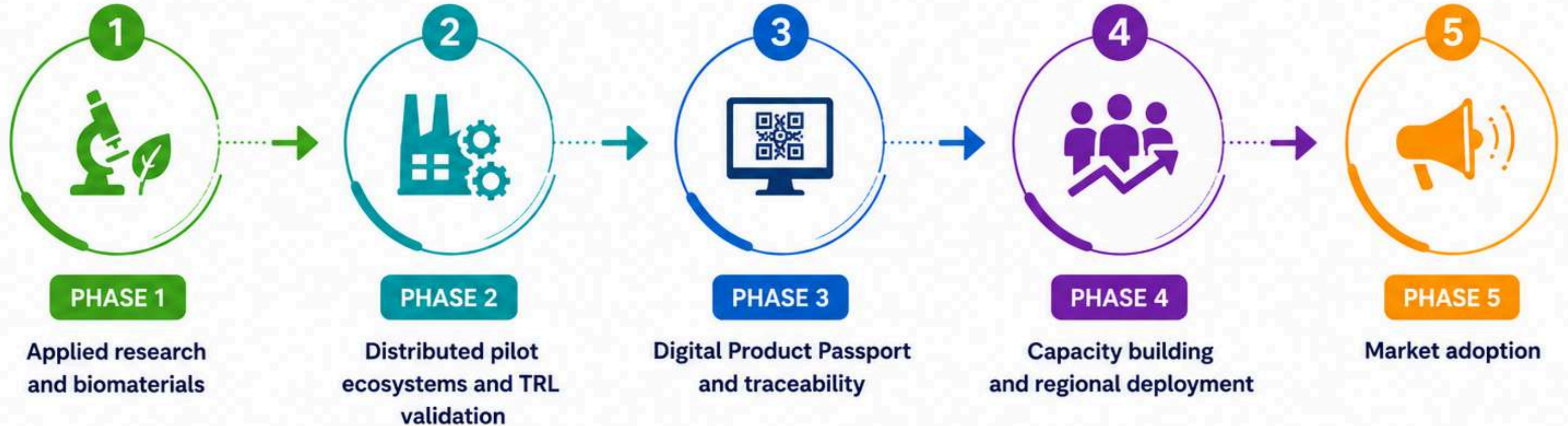


DIGITAL PARTNERS & TRACEABILITY

Digital Infrastructure for European Circular Traceability

- Digital Product Passport
- interoperable blockchain
- ESG traceability
- FAIR Data
- digital architecture
- data governance
- industrial interoperability
- European circular traceability

EUROPEAN IMPLEMENTATION





















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WHAT WE LOOK FOR IN EUROPEAN PARTNERS

Sought capabilities and strategic synergies




CONSORTIUM NEEDS			SOUGHT CAPABILITIES AND STRATEGIC SYNERGIES			
	TERRITORIAL VALIDATION Partners with the capacity to test and validate solutions in real territories and ecosystems.	Objective: Accelerate adoption in territories and ecosystems.		COMPLEMENTARY EXPERTISE Technical and sectoral knowledge that complements our capabilities.		STRATEGIC SYNERGIES Interest in long-term collaboration and joint impact generation.
	BIOMATERIAL TESTING Laboratories and centers with expertise in characterization and testing of biomaterials.	Objective: Ensure performance, safety and quality of biomaterials.		RESEARCH & INNOVATION R&D&I capabilities to develop cutting-edge solutions.		
	DIGITAL PRODUCT PASSPORT DPP experts to develop and integrate digital passports for circular products.	Objective: Ensure traceability, transparency and regulatory compliance.		COMMITMENT TO SUSTAINABILITY Values aligned with the circular economy and the green transition.		ACCESS TO NETWORKS & MARKETS Connections with industries, clusters, investors and new markets.
	BLOCKCHAIN Partners with capabilities in decentralized technologies for secure and reliable traceability.	Objective: Strengthen trust and the integrity of data.		INFRASTRUCTURES & RESOURCES Laboratories, pilot plants, digital tools and technological capacities.		
	SUSTAINABILITY & LCA Experts in life cycle assessment (LCA) and sustainability to reduce and improve environmental impact.	Objective: Quantify impact and support data-driven decision-making.		GEOGRAPHICAL PRESENCE Coverage and presence in different European regions for maximum representativeness.		KNOWLEDGE & TECHNOLOGY TRANSFER CAPACITY Experience in technology transfer and scaling of innovative solutions.
	RETAIL PILOTS Retail partners to run pilots with consumers and validate in real market conditions.	Objective: Test circular business models and generate demand.		SOLIDITY & TRACK RECORD Organizations with proven experience, stability and a long-term vision.		
	PUBLIC POLICIES & CIRCULAR PUBLIC PROCUREMENT Public entities and experts in policies to promote circular frameworks and public procurement.	Objective: Enable scalability through policies and public markets.				
	REGIONAL INNOVATION VALLEYS Regional innovation ecosystems to collaborate, co-create and generate synergies.	Objective: Connect regional capabilities and activate ecosystems.				
	EUROPEAN SCALABILITY Partners with European reach and experience in transferring and scaling innovations.	Objective: Expand solutions across Europe and internationally.				

WHAT WE BRING TO THE CONSORTIUM



LEADERSHIP & COORDINATION
Efficient management and collaborative approach.



STRATEGIC VISION
Systemic approach to circular and biomaterial textile innovation.



VISIBILITY & IMPACT
International dissemination and positioning of the project.



ACCESS TO ECOSYSTEMS
Network of clusters, institutions and key stakeholders across Europe and beyond.



REAL IMPACT
Measurable contribution to a sustainable, circular and competitive industry.

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FINAL VISION

Building the circular future of the European textile ecosystem

- circularity
- biomaterials
- bioeconomy
- traceability
- creativity
- interoperability
- sustainability
- European innovation



**Distributed circular ecosystems for the
future of European textiles**