

# BUSINESS MODELS AND INVESTMENT READINESS FOR CIRCULAR ECONOMY PROJECTS

29/09/2025

Francesco Niglia, KoysLab | Francesco Lembo & Zuzana Bohacova, ACR+







#### **DIAPO TITLE**





Francesco Niglia KOYS Lab





Francesco Lembo - Zuzana Bohacova







#### THE JOURNEY SO FAR



## How we got here

When	What	Key Outcomes
2024	TP Learning Needs Survey	Identified training priorities from Thematic Project partners
June 2024	1st CoP Gathering, Marseille	"Lessons Learnt from Green Deal Implementation" - first capacity building session
April 2025	3rd CoP Gathering, Sarajevo	COM-B behavioral change analysis across 14 TPs; identified business models as 2nd priority topic
June 18, 2025	"Breaking Barriers" Webinar	Behavioral change strategies for circular economy - 100+ Mediterranean stakeholders participated
September 29, 2025	Business Models Training	<b>Today's session</b> - Business models and investment readiness for TPs







#### THE JOURNEY SO FAR

## What else awaits us in 2025?

When	What
October 2025	Dialogue with interested TPs, collect inputs for business cases
29/10/2025 During next CoP	C3 Circular City Centre Methodology Presentation (EIB) – tbc soon
November/Early December 2025	Session for Takers, showcasing business cases, good practices, and methodologies from today's session and ongoing TP dialogue
June 18, 2025	Training Needs Survey (to include new TPs), assessment of satisfaction and feedback to reorient future training activities





#### **DIAPO TITLE**



## Dual-Track Training Methodology

Internal Track (TPs)	<b>Knowledge Transfer</b>	<b>External Track (Takers)</b>
Sarajevo CoP (April 2025)	COM Dhohavioral analysis across	"Breaking Barriers" Webinar (June 2025)
Behavioral change challenges & solutions from TP experiences	COM-B behavioral analysis across 14 TPs	3 100+ Mediterranean stakeholders learned from TP insights
Today's Business Models		Business Models for Takers
Training (Sept 2025)		(Nov/Dec 2025)









## Today's session

- Business Models & Investment Readiness
   emerged as the second topic highlighted as most important for strengthening your projects' sustainability and impact;
- **Duration:** 120 minutes interactive session
- Expert: Francesco Niglia + ACR+ team
- Approach: Theory + Application to ISE thematic areas + Interactive dialogue
- Outcome: increased awareness of investment readiness for TPs, methodologies and tools







#### **YOUR FEEDBACK**

## Breaking the ice – getting to know expectations & state of art









2 Enter the event code in the top banner



- 01. The value of business models in the Circular Economy
- 02. Suitable business models
- 03. Investment readiness
- 04. Interactive session







## 01.

The value of business models in the Circular Economy







# Sustainability and circular economy business models



- Types of Circular Business Models
- Value proposition design









## Business Models for the Circular Economy: "families"

#### FIVE BUSINESS MODELS OF CIRCULARITY

Circular Supplies Product As Service Product Life Extension Sharing Platform

Resource Recovery











Renewable, recoverable, or biodegradable sources serve as inputs in design and production

Purchase service or result rather than product or asset Prolong lifespan, utilization, and value through repair, remanufacture, resale Fully utilize assets by maximizing usage and value amongst several users Acquire additional use and value from existing resources by avoiding disposal and impacts from new extraction









12

#### **GET STARTED**



## Business Models for the Circular Economy: "families"

Circular \Supplies. Waste becomes an asset, not a liability that you pay to dispose of

**Product as a service.** The customer purchases a service for a limited time while the provider maintains ownership of the product.

**Product Life Extension.** Continuous income stream throughout the product's usage cycles (upgradability, reusability, reconditioning, and recyclability)

**Sharing Platform**. It maximises the utilisation of idle assets (industrial, machinery, warehouses, etc.) across a community while providing customers with affordable and convenient access to products and services.

**Resource Recovery**. Focuses on the end stages of the usage cycle, the recovery of embedded materials, energy, and resources that are no longer functional in their current application.









## Behind a business model family, there are many variants

Defining suitable business models in the Circular Economy domain is not a straightforward task.

The business case for adopting circular business models **is not static** (OECD) but varies according to a broad set of societal-level factors.

The mentioned values in each model are **perceived differently by stakeholders** participating in the circular economy model.







#### **GET STARTED - BUSINESS MODELS FAMILIES FOR TP FOCUS AREAS**



### Let's tailor to the TP sectors and needs

Smart & Sustainable Supply Chains (Circular \Supplies). Responsible sourcing, transparency, and the use of renewable or recycled inputs

Product Life Extension & Service-Based Models (Product as a service / Product Life Extension). These are inherently linked. The model combines the ideas of extending product lifespan and altering the ownership model

Knowledge Sharing & Collaborative Platforms (Sharing Platform). Focuses on knowledge exchange, collaboration, and innovation, which complements maximising the utilisation of idle assets through community-based platforms.

Resource Optimisation & Industrial Symbiosis (Resource Recovery). Focuses on extracting value from waste or by-products and maximising it through inter-organisational collaboration.

Circular Design & Eco-Innovation. Overarching family, with elements from all the 5









#### **GET STARTED – BUSINESS MODELS FAMILIES FOR TP FOCUS AREAS**



Generic families	<b>-</b>	TPs' tailored families
Circular \Supplies		Smart & Sustainable Supply Chains
Product as a service		Product Life Extension & Service- Based Models
Product Life Extension.		
Sharing Platform		<b>Knowledge Sharing &amp; Collaborative Platforms</b>
Resource Recovery		Resource Optimisation & Industrial Symbiosis
(including several elements for each of the above families)		Circular Design & Eco-Innovation





#### **GET STARTED – BUSINESS MODELS FAMILIES FOR TP FOCUS AREAS**



Generic families	TPs' tailored families	Key parameters
Circular \Supplies	Smart & Sustainable Supply Chains	supply chain transparency, traceability, and responsible sourcing practices
Product as a service	Product Life Extension & Service-	product durability, repairability, and customer relationships
Product Life Extension.	Based Models	
Sharing Platform	Knowledge Sharing & Collaborative Platforms	stakeholder engagement, knowledge transfer, and network effects
Resource Recovery	Resource Optimisation & Industrial Symbiosis	material intensity, waste reduction, and inter-organisational collaboration
(including several elements for each of the above families)	Circular Design & Eco-Innovation	design for circularity, eco-innovation, and life cycle assessment









## Smart & Sustainable Supply Chains

This family focuses on creating **more transparent, traceable, and sustainable supply chains**, ensuring that resources are sourced responsibly and that environmental and social impacts are minimised throughout the value chain.

- Key parameters include supply chain transparency, traceability, and responsible sourcing practices.
- > focus on transparency, traceability, & responsible sourcing









#### Product Life Extension & Service-Based Models

This family focuses on extending the lifespan of products through repair, refurbishment, remanufacturing, and reuse. It often involves shifting from traditional product sales to service-based models, where customers pay for access to a product or service rather than owning the product outright.

- Key parameters include product durability, repairability, and customer relationships.
- > focus on extending product lifecycles & shifting from ownership to access









## Knowledge Sharing & Collaborative Platforms

This family focuses on **creating platforms or networks that facilitate knowledge sharing, collaboration, and innovation among stakeholders**. It often involves open innovation, community-based initiatives, and the sharing of best practices.

- Key parameters include stakeholder engagement, knowledge transfer, and network effects.
- > focus on facilitating knowledge exchange, collaboration, & innovation









## Resource Optimisation & Industrial Symbiosis

This family focuses on minimising resource inputs, maximising resource utilisation, and finding innovative ways to use waste or byproducts as valuable inputs for other processes. They often involve collaboration between different industries or stakeholders to create closed-loop systems

- Key parameters include material intensity, waste reduction, and interorganisational collaboration.
- > focus on efficient resource use & waste valorisation within or between industries









## Circular Design & Eco-Innovation

This family focuses on designing products and processes that are inherently circular and sustainable from the outset, considering material selection, product durability, recyclability, and end-of-life management.

- Key parameters include design for circularity, eco-innovation, and life cycle assessment.
- Focus on designing products and processes that are inherently circular & sustainable







#### **Knowledge sharing**

Smart & Sustainable Supply Chains

Knowledge
Sharing &
Collaborative
Platforms

Circular
Design &
Eco-

Innovation

Resources

Resource Optimisation & Industrial Symbiosis Product Life Extension & Service-Based Models

GET STARTED – BUSINESS MODELS FAMILIES FOR TP FOCUS AREAS



Indicative placement of the BM families

Products Services

Innovative sustainable economy







#### TP sectors and business models families

- The families, in principle, may be applied to all the focus areas.
- The "family" provides the "core" idea of the model. Yet, some "directions" can be outlined.
- Within each family, we can find different/several business model types.
- **Hybrid models** are the most common. Because it's not possible to define exactly one perfect fit.
- A Business model enables long-term sustainability. CE BMs also enable environmental, social (economic, etc.)









## Key leverages of a circular economy business model

- A CE Business Model enables a project/initiative to be sustainable in terms of:
  - Resource availability (circularity helps a lot...)
  - Economy
  - Stakeholders' interest fulfilment
  - Social Environmental
- A BM is primarily identified by the interactions among stakeholders and by the added value they provide to others. (the Business Ecosystem)
  - Stakeholders' interaction may vary and contribute differently (you need to analyse them!)









## Key leverages of a circular economy business model

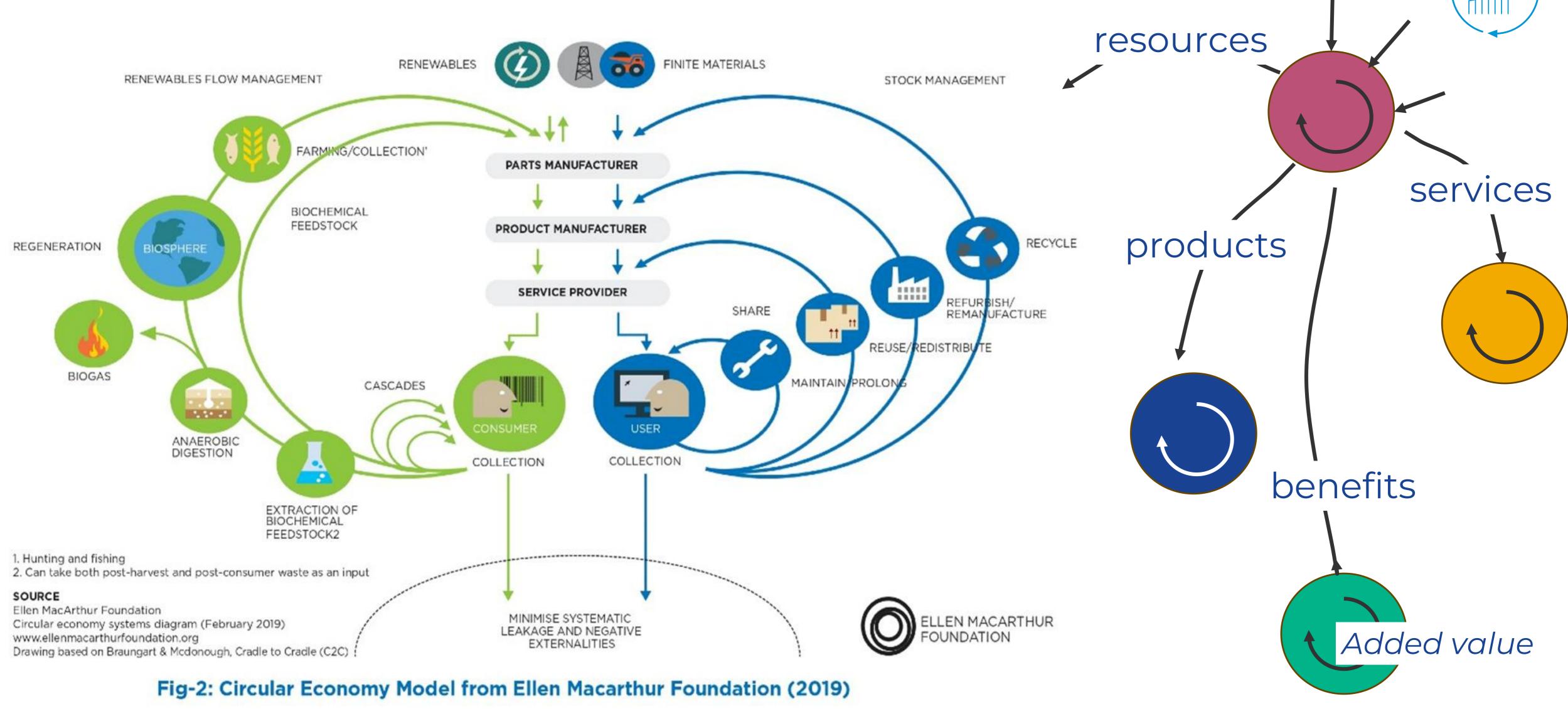
- It's mandatory to check what and how contributes to the creation of the added value (not only the economic one)
  - > For each stakeholder (stakeholders may interact with one or more.)
    - Producer
    - Manufacturer
    - Reseller
    - User
    - •
  - > For each step / interaction.
    - Knowledge or good transfer







#### **GET STARTED - BUSINESS MODELS FAMILIES FOR TP FOCUS AREAS**





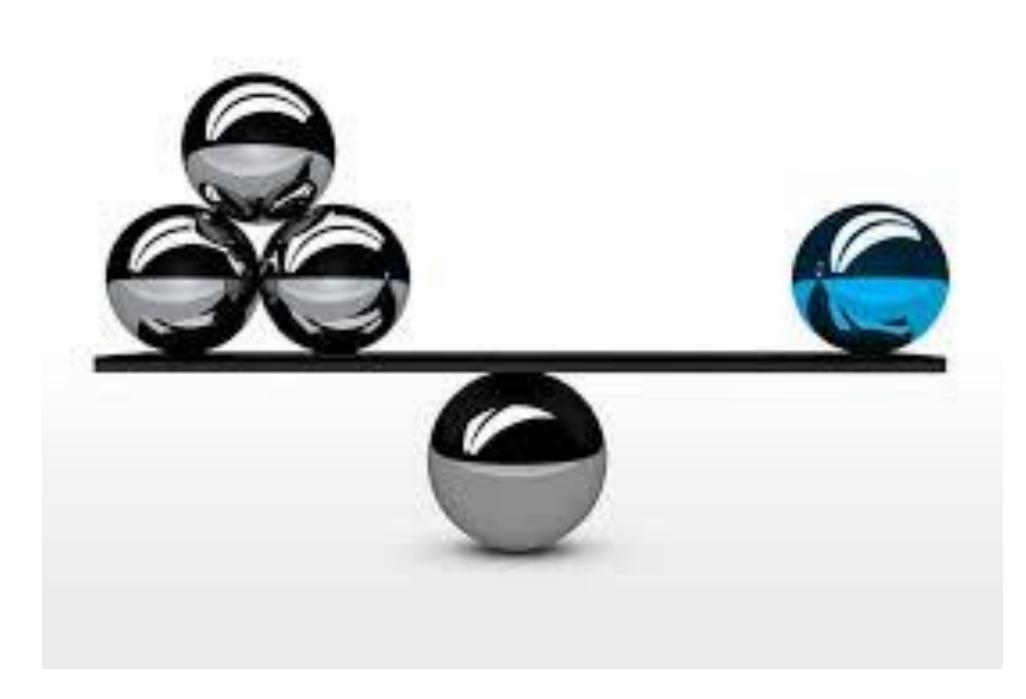






## Key leverages of a circular economy business model

- A solid and coherent business model satisfies all stakeholders' needs by providing added value
- Must be tailored to each case (starting from the main "family" and the core business.
  - Resource values vary a lot, also depending on the raw material
  - Number of users or stakeholders
  - Residual value of goods
  - Knowledge value









#### **GET STARTED - BUSINESS MODELS FAMILIES FOR TP FOCUS AREAS**

## TP sectors and potential business model for the projects

Circular Supply/Value Chain Model

Platform Business Model

Regenerative Agriculture Model

Data-Driven Optimisation Model

Innovation Ecosystem Model

Product-as-a-Service Model

Extended Producer Responsibility (EPR)

Model

Community-Based Model

Sustainable Materials Substitution Model

Industrial Symbiosis Model

Premium Branding Model

Ecosystem Services Market Model

Network-Based Support Model

Demand Aggregation Model

Community-Centric Development Model

Circular Economy Solutions Provider Model

Incubation Model

Innovation Hub Network Model

Closed-Loop Recycling Model

Reverse Logistics and Textile Reuse Model

Repair and Refurbishment Model

Bio-Waste Conversion Model









#### MARINE RESOURCES

#### Most relevant:

Circular Design & Eco-Innovation: focuses on minimising waste and maximising resource utilisation within marine industries.

Knowledge Sharing & Collaborative Platforms: leverages a digital or physical marketplace to connect different stakeholders within the marine ecosystem, facilitating collaboration and innovation







#### AGRI-FOOD SYSTEMS

#### **Most relevant:**

Circular Design & Eco-Innovation: focuses on improving soil health, enhancing biodiversity, and sequestering carbon in agricultural landscapes

Smart & Sustainable Supply Chains: leverages data and technology to improve resource efficiency, reduce waste, and enhance decision-making in agricultural operations







#### INDUSTRIAL TRANSITION

#### Most relevant:

Resource Optimisation & Industrial Symbiosis: leverages collaboration among companies to exchange resources, byproducts, and waste streams, creating a more circular and efficient industrial ecosystem.

Knowledge Sharing & Collaborative Platforms: create a supportive environment for innovation and entrepreneurship, facilitating the development and adoption of green technologies and sustainable business practices.







#### RESOURCES VALORISATION

#### Most relevant:

Circular Design & Eco-Innovation: incentivise producers to design products that are easier to recycle, repair, or reuse.

**Product Life Extension & Service-Based Models:** It offers a service that provides the same functionality or benefit, while retaining ownership and responsibility for the product's end-of-life management.





#### **VALUE PROPOSITION DESIGN**



Creating value for customers while simultaneously addressing environmental and social challenges by optimising resource use and minimising waste

It goes beyond traditional value propositions by incorporating sustainability and circularity principles into the core of the offering Customer Jobs, Pains, and Gains

Circular Value Proposition Elements

Key Considerations for VPD in a Circular Economy

Examples



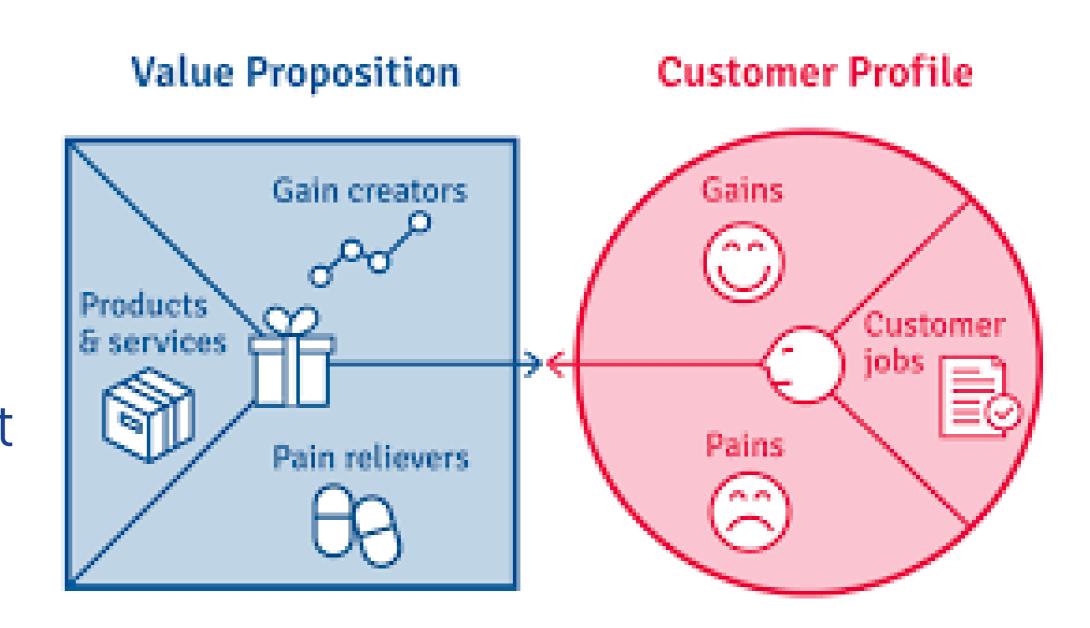






## Creating a compelling Value Proposition

- Beyond traditional benefits: Consider environmental and social value.
- Focus on lifecycle costs: Highlight longterm savings and resource efficiency.
- Transparency and traceability: Build trust by communicating your circular practices.
- Engage stakeholders: Understand their needs and involve them in the design <sub>35</sub> process











### Customer Jobs, Pains, and Gains

Customer Jobs: Understanding the functional, social, and emotional tasks customers are trying to accomplish, but with a focus on sustainability-related jobs

Customer Pains: Identifying the pain points that customers experience while trying to accomplish their jobs, with an emphasis on challenges related to sustainability

Customer Gains: Describing the benefits and outcomes that customers desire, with a focus on value derived from circular practices









## Circular Value Proposition Elements

**Products/Services:** What are you offering to customers to help them accomplish their jobs? Circular value propositions provide products and services designed for durability, built to last longer and reduce the need for frequent replacements. Repairability, Upgradability, Recyclability, Service-Based Access

Gain Creators: How does your product/service create gains for customers in a circular context? (Reducing environmental impact, Lowering lifecycle costs through repair, reuse, or remanufacturing. Providing access to innovative and eco-friendly products. Enhancing brand reputation and customer loyalty.

Pain Relievers: How does your product/service alleviate customer pains in a circular context? (Offering affordable payment options (e.g., leasing, instalment payments). Providing convenient repair and maintenance services. Ensuring responsible end-of-life management (e.g., take-back programs). Communicating transparently about the environmental and social impact of the product/service.









### Key considerations for VPD in a Circular Economy

- > Lifecycle Thinking: Consider the entire product lifecycle, from raw material extraction to end-of-life management.
- > Stakeholder Integration: Involve stakeholders (suppliers, customers, communities) in the design and development of the value proposition.
- > Transparency and Trust: Build trust with customers by being transparent about the environmental and social impact of your products and services.
- > Long-Term Value: Focus on creating long-term value for customers, the environment, and society.
- > Innovation: Embrace innovation to develop new and more sustainable ways of delivering value.





**Innovative** 



#### **VALUE PROPOSITION DESIGN IN A CIRCULAR ECONOMY**



Delivering and sustaining long-term value over time

**Resilience**: Designing for durability, adaptability, and resource efficiency.

**Lifecycle thinking**: Optimise the entire lifecycle of products and services.

**Collaboration**: Building partnerships with suppliers, customers, and other stakeholders.

Continuous improvement: Monitoring performance and innovating to enhance circularity









#### **VALUE PROPOSITION DESIGN IN A CIRCULAR ECONOMY**



### Articulating Value to Stakeholders (communication)

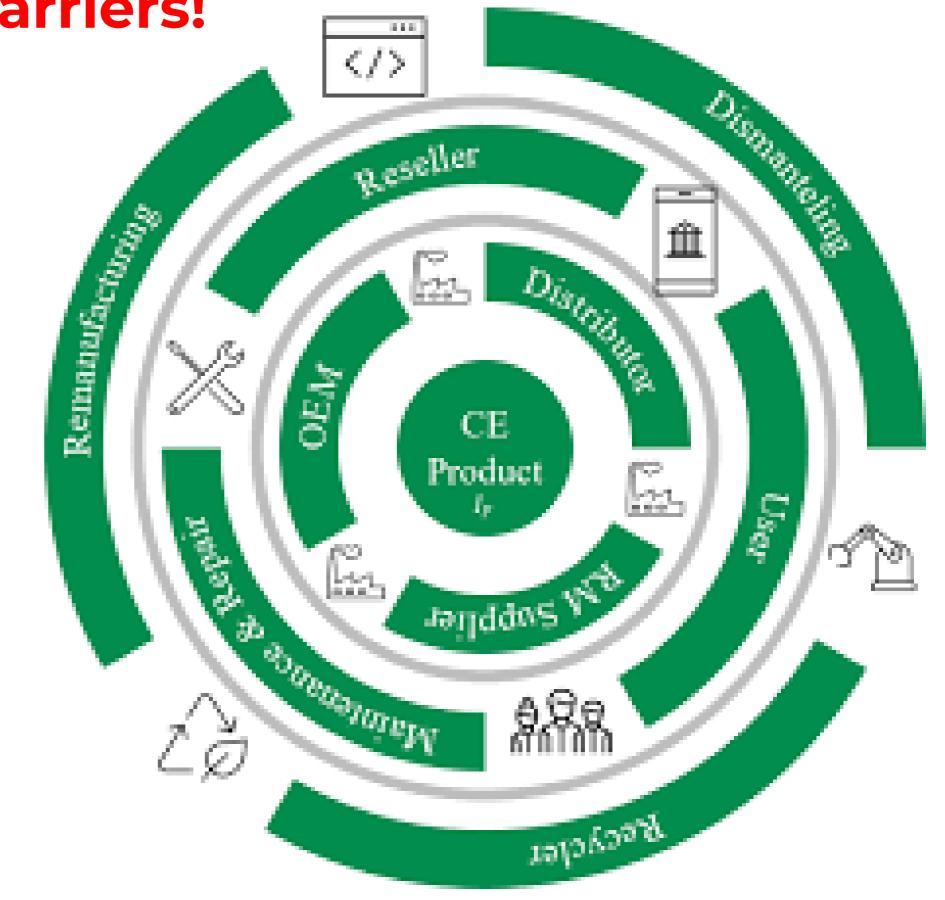
**Break the barriers!** 

**Customers**: Highlight cost savings, product performance, and environmental benefits.

**Investors**: Demonstrate reduced risk, new revenue streams, and long-term growth potential.

**Society**: Showcase environmental protection, resource efficiency, and job creation.

Use metrics and certifications: Quantify your circular performance and build credibility









#### **VALUE ARTICULATION FRAMEWORK**



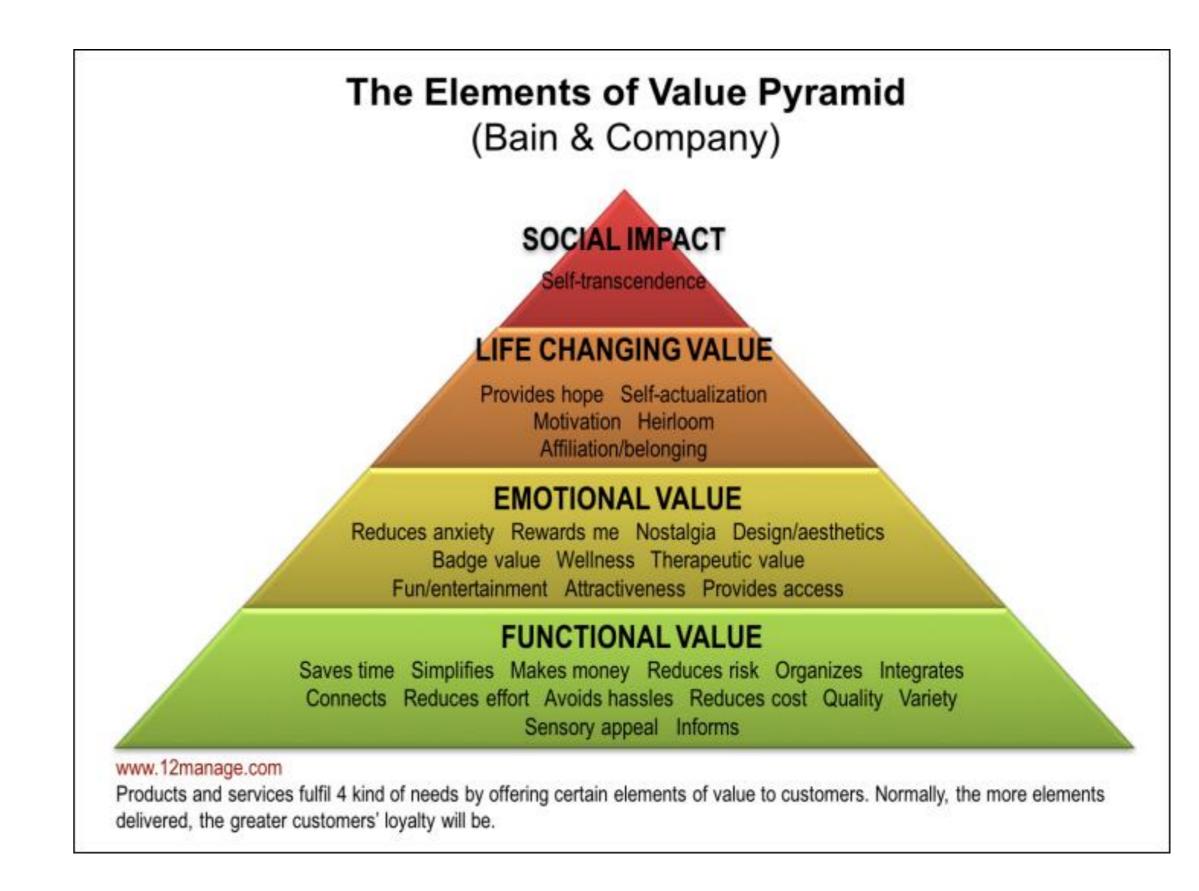
### (minimum) Elements to be considered

**Key Needs/Priorities:** What are their core motivations and expectations?

Tangible Benefits: What specific, measurable advantages do they receive?

**Intangible Benefits:** What emotional or aspirational values are fulfilled?

Metrics & Evidence: What data can be used to demonstrate value?









#### STAKEHOLDERS-SPECIFIC VALUE PROPOSITION



### Customers

**Key Needs/Priorities:** Quality, affordability, convenience, performance, ethical considerations, and personal values.

**Tangible Benefits:** Lower Lifecycle Costs, Access to Innovative Products/Services, Convenient Access/User Experience

**Intangible Benefits:** Feeling Good/Ethical Alignment, Status/Differentiation, Security/Reliability:

**Example Articulation (Sustainable Clothing Brand):** "Our clothing is made to last, saving you money in the long run. Plus, you'll feel good knowing you're supporting ethical manufacturing and reducing textile waste."

**Metrics & Evidence:** Customer satisfaction scores, Customer retention rates, Referral rates, Lifetime value (LTV)





#### STAKEHOLDERS-SPECIFIC VALUE PROPOSITION



### Investors

**Key Needs/Priorities:** Financial returns, risk mitigation, long-term growth, positive impact, brand enhancement.

Tangible Benefits: Increased Revenue/Profitability, Market Differentiation, Reduced Risk, Access to New Markets/Customers.

Intangible Benefits: ESG Alignment, Brand Enhancement, Social License to Operate.

Example Articulation (Recycling Technology Company): "Our technology offers a high ROI by transforming waste into valuable resources, creating a stable revenue stream and reducing reliance on volatile commodity markets. We also meet growing investor demand for sustainable solutions."

Metrics & Evidence: Financial projections (revenue, profitability, ROI), Market share, Growth rate, Risk assessments, ESG scores **Innovative** 







#### STAKEHOLDERS-SPECIFIC VALUE PROPOSITION



### Society

**Key Needs/Priorities:** Environmental protection, social equity, economic prosperity, public health, community well-being.

**Tangible Benefits:** Reduced Pollution & Resource Depletion, Job Creation & Economic Growth, Improved Public Health, Community Development

Intangible Benefits: Environmental Stewardship, Social Justice, Community Resilience Example Articulation (Sustainable Agriculture Project): "Our farming practices improve soil

health, reduce water pollution, and create local jobs, benefiting both the environment and the community."

Metrics & Evidence: Environmental impact assessments (air quality, water quality, biodiversity) Social impact assessments (job creation, income levels, community health outcomes) Economic impact assessments (local economic activity, tax revenues)

**Innovative** 







### 1. MUD Jeans (NL, with a strong presence in Europe)

**Business Model**: Lease a Jeans. Customers lease jeans for a monthly fee, and after a year, they can either return them for recycling or keep them. When returned, the jeans are recycled into new denim.

Circular Value Proposition: "Wear great jeans, reduce waste, and help us close the loop."

**Customer Benefit:** Access to stylish, high-quality jeans with no long-term commitment, reduced environmental impact, and participation in a circular system.

Euro-MED Relevance: Addresses textile waste challenges in the region.

Links: https://mudjeans.eu/









### 3. Rescued (Italy)

**Business Model:** Rescued transforms food surplus into new, innovative products.

Circular Value Proposition: "Give new life to food and do good to the planet".

**Customer Benefit:** New and unusual products created from food surplus that otherwise should have been thrown away.

Euro-MED Relevance: Addresses food waste.

Links: https://rescued.it/en/









### 4. Sea2See Eyewear (Spain)

Business Model: Manufactures eyewear from recycled ocean plastic.

**Circular Value Proposition**: "Wear the change. Eyewear made from recycled ocean plastic, cleaning our seas, empowering local communities."

**Customer Benefit**: Stylish, high-quality eyewear that helps to reduce marine plastic pollution and support coastal communities.

Euro-MED Relevance: Addresses marine pollution.

Links: https://sea2see.org/









### 5. Refurbed (Germany, Austria, Italy, Poland, France):

Business Model: Refurbished electronics.

Circular Value Proposition: "Sustainable electronics".

**Customer Benefit**: Save up to 40% compared to new, sustainable alternative to new electronics.

Euro-MED Relevance: Addresses e-waste.

Links: https://www.refurbed.it/







### 6. Too Good to Go (Denmark, operating across Europe)

Business Model: App to connect businesses with surplus food to consumers.

Circular Value Proposition: "Save food, save money, save the planet"

Customer Benefit: Enjoy good food, and help to save the planet.

Euro-MED Relevance: Addresses food waste.

Links: https://toogoodtogo.com/en/







### Successful business models from Mediterranean initiatives



# Let's look into one business model example for each area

- Smart & Sustainable Supply Chain
- Knowledge Sharing & Collaborative
   Platforms
- Resource Optimisation & Industrial
   Symbiosis
- Product Life Extension & Service-Based Models







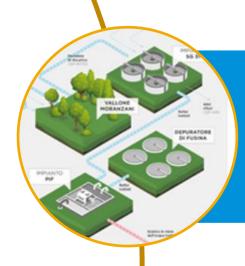
#### **CIRCULAR BUSINESS MODELS EXAMPLES: COMPARATIVE ANALYSIS**





#### **ECOALF**

Ocean plastic recycling | Spain



#### **ASI MARGHERA**

Industrial symbiosis | Italy



#### **AGRICIRCLE**

Smart agriculture platform | Switzerland



#### **ALVELAL**

· Regenerative farming | Spain

### **Analysis Framework**

- Model characteristics & innovation
- >> Stakeholder value proposition
- >> Economic benefits & value distribution
- >> Impact measurement & scalability

Goal: Extract replicable insights for circular economy project development







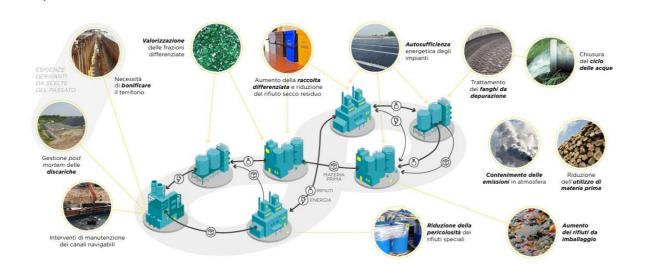
#### **COMPARING BUSINESS MODELS - BUSINESS MODEL OVERVIEW**

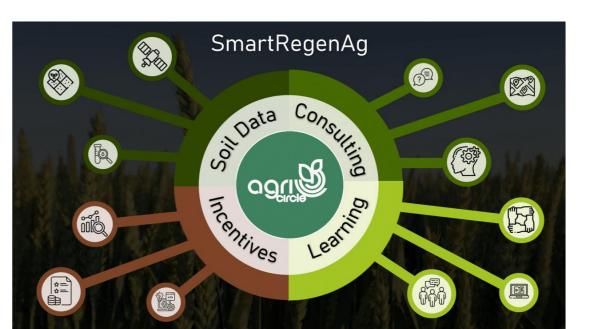


	ECOALF	ASI MARGHERA	AGRICIRCLE	ALVELAL
	Spain	Italy	Switzerland	Spain
Model Family	Sustainable Supply Chains	Industrial Symbiosis	Service-Based Models	Collaborative Platforms
Specific Model	Closed-Loop Recycling	Industrial Symbiosis	Data-Driven Optimization	Regenerative Agriculture
Core Focus	Ocean plastic recycling into fashion	Resource exchange between companies	Farm optimization platform	Land restoration through farming
Key Innovation	Waste-to-fashion transformation	Circular industrial ecosystem	Real-time agricultural data	Multi-stakeholder regeneration











#### **COMPARING BUSINESS MODELS – VALUE PROPOSITION AND STAKEHOLDERS**



		ECOALF	ASI MARGHERA	AGRICIRCLE	ALVELAL
	Primary Stakehold ers	<ul> <li>→ Investors</li> <li>→ Suppliers</li> <li>→ Customers</li> <li>→ Communities</li> </ul>	Industrial companies Local government Communities	Farmers Food processors Consumers Researchers	Farmers Businesses Researchers Communities
	Core Value Propositi on	"Be part of the change" - Sustainable fashion without compromising quality	Platform for resource optimization and new revenue through symbiosis	Data-driven insights to optimize farming and increase profitability	Restore land and enhance livelihoods through regeneration
	Target Problem	Ocean plastic pollution & linear fashion model	Industrial waste & resource inefficiency	Agricultural waste & low farm productivity	Land degradation & climate vulnerability
-	Scalabilit y Potential	High - Global fashion market	Medium - Industrial zones	High - Global agriculture	Medium - Regional adaptation needed
		ECOALF	Valorizzazione delle frazioni differenziate  DERIVANTI DA SCELTE DEL PASSATO  Necessità di bonificare ii territorio  Aumento della raccolta differenziata e riduzione del rifiuto secco residuo	SmartRegenAg  SmartRegenAg  Solitata Consultation  Solitata Consulta	Fomentamos el espíritu emprendedor

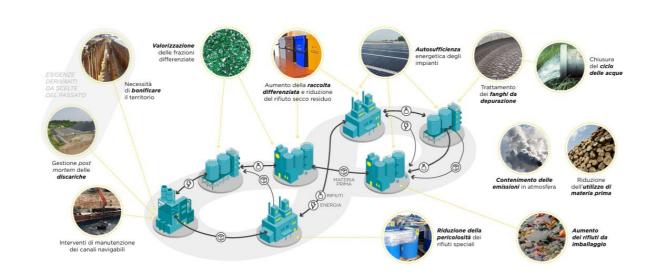
#### **COMPARING BUSINESS MODELS - BENEFITS & DIRECT ECONOMIC VALUE**

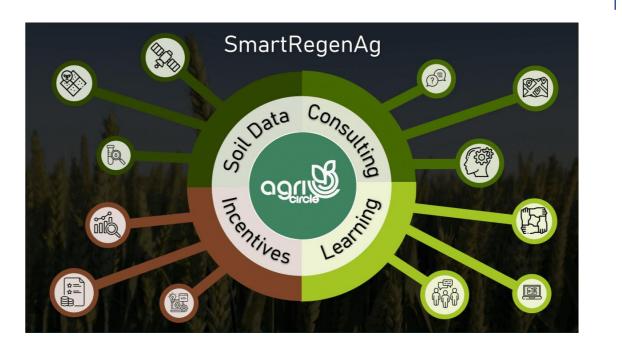


		ECOALF	ASI MARGHERA	AGRICIRCLE	ALVELAL
	Key Tangible Benefits	Revenue growth, Job creation, Quality products, Cost savings	Reduced disposal costs, Lower energy costs, Tax revenue, Employment	Higher yields, Lower input costs, Food security, Supply reliability	Premium markets, Increased yields, Carbon sequestration, Jobs
	Key Intangible Benefits	ESG alignment, Ethical consumption, Brand loyalty, Community empowerment	Improved reputation, Innovation leadership, Competitive advantage, Sustainability model	Sustainable practices, Farmer empowerment, Consumer trust, Knowledge advancement	Land stewardship, Community pride, Customer loyalty, Climate mitigation
	Direct Economic Value	Material cost reduction, Brand value growth, Stable supplier revenue, Local development	Cost savings, Revenue generation, Investment attraction, Regional competitiveness	Farmer profitability, Premium pricing, Reduced losses, Resilient communities	Market opportunities, Carbon credits, Economic resilience, Premium access
	Value Distributio n	Shared across supply chain & communities	Concentrated in industrial ecosystem	Distributed to farming communities	Spread across rural regions











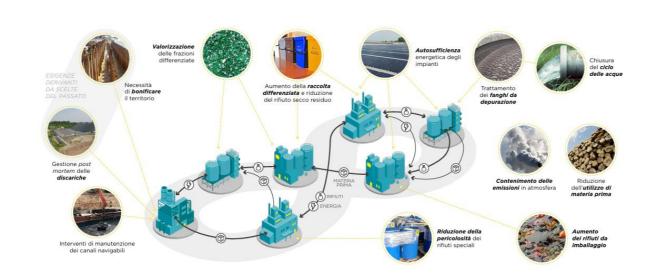
#### **COMPARING BUSINESS MODELS - IMPACT & MEASUREMENT**

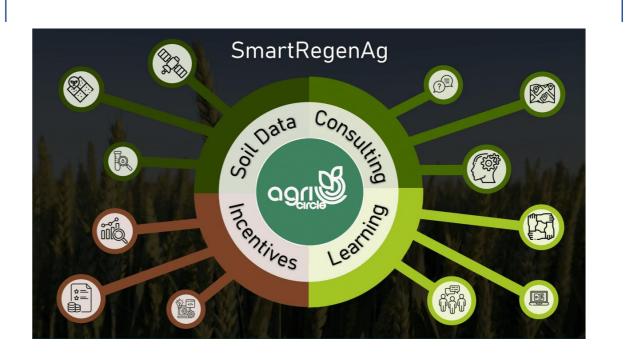


	ECOALF	ASI MARGHERA	AGRICIRCLE	ALVELAL
Indirect Economic Value	Reduced pollution costs, Lower healthcare costs, Resource conservation, Enhanced fisheries	Environmental protection, Reduced remediation, Innovation ecosystem, Knowledge spillovers	Reduced environmental costs, Healthier land, Better water quality, Climate resilience	Ecosystem services, Soil health, Water quality, Biodiversity enhancement
Environme ntal & Social Impact	Ocean waste recovered, Emissions reduced, Community employment, Behavior change	Waste reduction, Energy savings, Workforce upskilling, Regional pride	Water optimization, Chemical reduction, Farmer knowledge, Food security	Carbon sequestration, Biodiversity restoration, Rural revitalization, Inclusion
Key Success Metrics	Tons plastic recovered, Revenue growth %, Customer satisfaction, Brand recognition	% Cost savings, Jobs created, Waste reduction volume, Partnerships formed	% Yield increase, % Cost reduction, Adoption rate, Farmer retention	Tons carbon sequestered, Biodiversity index, Income growth %, Hectares restored
Scalability Potential	High - Global fashion industry	Medium-High - Industrial zones	Very High - Any agricultural region	Medium - Regional adaptation needed













### ECOALF (Spain)

Ecoalf's business model is centred on creating high-quality fashion apparel and accessories using recycled materials, primarily ocean plastic, fishing nets, and other waste materials. They emphasise transparency, traceability, and environmental and social responsibility throughout their value chain.

Business Model family: Smart & Sustainable Supply Chains

Business Model: Closed-Loop Recycling Model

https://ecoalf.com/

•









### Customers

Key Needs/Priorities: Style, quality, durability, sustainability, ethical considerations.

**Value Proposition:** "Be part of the change." Ecoalf empowers consumers to make a positive impact on the environment without compromising on style or quality.

**Tangible Benefits:** High-Quality, Fashionable Products, Durability and Longevity, Competitive Pricing.

Intangible Benefits: Ethical Consumption; Environmental Contribution

Metrics/Evidence: Customer Satisfaction Scores, Brand Loyalty, Social Media
Engagement, Surveys.









### Investors / Shareholders

**Key Needs/Priorities:** Financial returns, positive social and environmental impact, brand reputation.

**Tangible Benefits**: Growth and Profitability; Brand Recognition and Market Leadership; Reduced Risk:

Intangible Benefits: ESG Alignment; Purpose-Driven Investment

**Metrics/Evidence**: Revenue growth and profitability metrics, Brand recognition and media coverage, Impact reports and sustainability certifications







### Suppliers

**Key Needs/Priorities:** Fair prices, long-term partnerships, ethical practices, positive social and environmental impact.

**Value Proposition:** Providing a stable market for recycled materials and ocean waste, creating economic opportunities and supporting environmental conservation.

Tangible Benefits: Stable Revenue Streams; Capacity Building

Intangible Benefits: Purpose Alignment; Recognition and Empowerment.

**Metrics/Evidence:** Volume of materials sourced from suppliers, Fair trade certifications, Impact assessments







### Local Communities

Key Needs/Priorities: Job creation, economic opportunities, improved environmental conditions, and social inclusion.

Value Proposition: "Empowering Communities, Protecting Our Oceans: Creating Jobs and Reducing Pollution."

**Tangible Benefit**: Job Creation, Economic Development, and Improved Environmental Conditions.

Intangible Benefits: Community Empowerment; Improved Quality of Life Metrics/Evidence: Number of jobs created in local communities, Community health indicators, Engagement in Ecoalf programs and initiatives, and Improved local area





**Innovative** 



#### **EXAMPLE: ECOALF - STAKEHOLDER VALUE CREATION**



### Society

**Key Needs/Priorities:** Environmental sustainability, resource efficiency, social equity, and economic prosperity.

**Value Proposition:** "A Model for the Future: Promoting a Circular Economy, Reducing Waste, and Protecting Our Planet"

**Tangible Benefits**: Reduced Environmental Impact; Economic Growth; Improved Quality of Life

Intangible Benefits: Global Sustainability; Social Responsibility

**Metrics/Evidence:** Reduced Environmental metrics and audits. Improved social environment through surveys or data.









### Direct Economic Benefits

**For Ecoalf:** Revenue Generation; Cost Savings; Reduced Raw Material Costs; Waste Reduction Savings; Increased Brand Value & Market Share.

For Suppliers (Recycling Partners, Ocean Clean-Up Organisations): Stable Revenue Streams:

**For Local Communities:** Job Creation; Local Economic Development; Increased Tourism Revenues









### Indirect Economic Benefits

**Reduced Environmental Costs:** Decreased Pollution Remediation Costs; Lower Healthcare Costs.

Resource Conservation: Lower Resource Depletion Costs; Reduced Energy Costs: Enhanced Ecosystem Services: Increased Fisheries Productivity; Improved Agricultural Productivity.





### Area di Sviluppo Industriale – Marghera (Italy)

The Area di Sviluppo Industriale (ASI) of Porto Marghera, a large industrial area near Venice, Italy, has implemented numerous industrial symbiosis projects. By facilitating the exchange of resources like heat, water, and waste materials between companies in the area, they aim to reduce waste, lower costs, improve environmental performance, and create a more resilient industrial ecosystem.

Business Model family: Resource Optimisation & Industrial Symbiosis

Business Model: Industrial Symbiosis Model

https://www.entezona.it/









### Participating companies

**Key Needs/Priorities**: Reduced operating costs, waste management solutions, improved resource efficiency, access to new revenue streams, enhanced competitiveness, and regulatory compliance.

**Value Proposition:** ASI Porto Marghera provides a platform for businesses to optimise their resource use, minimise waste disposal costs, and unlock new revenue opportunities through industrial symbiosis.

**Tangible Benefits:** Reduced Waste Disposal Costs; Lower Energy Costs; Reduced Water Consumption Costs; Increased Operational Efficiency.

Intangible Benefits: Improved Reputation; Competitive Advantage.









### ASI Management / Facilitators

Key Needs/Priorities: Attracting new businesses, promoting industrial symbiosis, tracking and measuring environmental performance, supporting sustainable development, and enhancing park reputation.

Value Proposition: Creating a thriving circular economy ecosystem that attracts new businesses, reduces waste, promotes sustainability, and enhances the region's economic competitiveness.

Tangible Benefits: Enhanced Reputation: Support economic growth, reduce risks, Environmental Protection, Local Economic Promotion

Intangible Benefits: Position as a Model for Innovation; Increased Social Value: Create an area that empowers others. **Innovative** 



sustainable economy







### Local Government & Policymakers

**Key Needs/Priorities:** Sustainable economic development, waste reduction, environmental protection, job creation, and regulatory compliance.

Value Proposition: ASI Porto Marghera contributes to the region's sustainability goals.

**Tangible Benefits**: Waste Volume Reductions, Increased Tax Revenue, *High Rates of New Employment* 

**Intangible Benefits:** Showcase Regional Sustainability: The opportunity to display a better future, Regional Model for Collaboration: Work with other areas to improve economic values







### Local Community

Key Needs/Priorities: Job Opportunities, less pollution, improved environment, positive impact, and more inclusion.

Value Proposition: Porto Marghera fosters new job opportunities and promotes environmental protection.

Tangible Benefits: Employment Opportunities: There are good opportunities to create fair opportunities. Healthy People and Soil: People can feel a stronger connection to this through education.

Intangible Benefits: Socially Responsible Actions and Initiatives: Inclusiveness is at the heart of the project.





**Innovative** 



#### **EXAMPLE: ASI MARGHERA – STAKEHOLDER VALUE CREATION**



### Society

Key Needs/Priorities: Solutions that help reverse pollution and waste.

Value Proposition: The area contributes to a new way to solve old problems.

**Tangible Benefits:** Reduce emissions in the area. Reuse water. Support renewable solutions.

**Intangible Benefits**: Environmental Responsibility: It leads other industrial areas to make the change.







### Economic Benefits

- Cost Savings for Participating Companies: Lower costs due to reduced expenses from landfills.
- Increased Revenue Generation: The project comes with high returns.
- Job Creation from circular companies: More employment opportunities can occur.
- Attracting New Investments
- Enhanced Regional Competitiveness: It is easier to attract business in the sector.









### Interactive Assessment – Part I

- Q. Which business model do you believe fits your needs better?
- Q. In which areas do you think you need more support?
- Q&A











unded by European Union

## 02.

# Suitable Business Models









Measurement and assessment parameters for circular business models



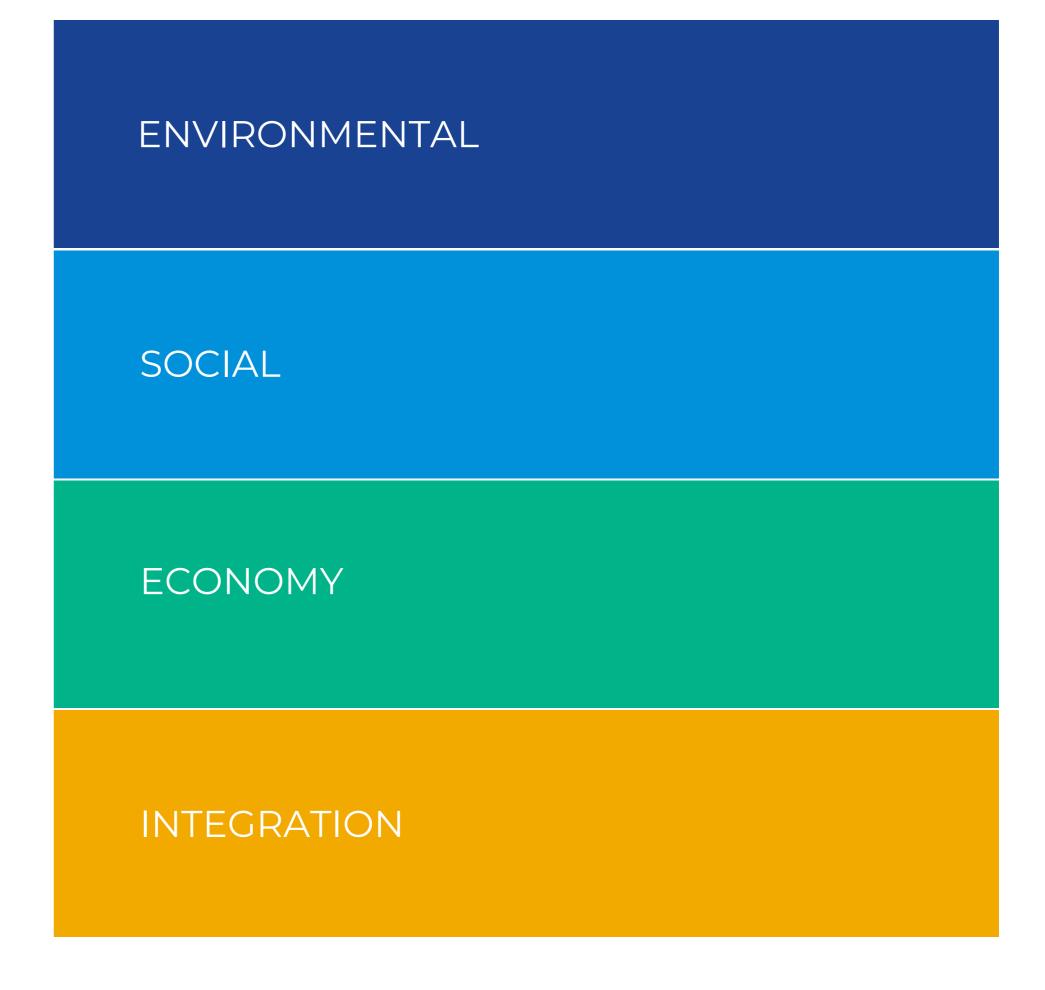




### **BUSINESS MODELS PERFORMANCES**



Understanding and measuring performance is critical for driving the adoption of circular business models.











# Environmental Impact Metrics

### **Key Metrics:**

Carbon Footprint: Total greenhouse gas emissions associated with the business model (measured in tonnes of CO2 equivalent).

Waste Reduction: Amount of waste diverted from landfill or incineration (measured in tons).

Life Cycle Assessment (LCA): Comprehensive assessment of environmental impacts across the entire product or service lifecycle.

**Resource Depletion:** Reduction in the use of virgin materials or scarce resources.









### MEASUREMENT AND ASSESSMENT PARAMETERS FOR CE BUSINESS



### Social Value indicators

### **Key Indicators:**

**Job Creation:** Number of new jobs created through the circular business model.

**Community Benefits:** Positive impacts on local communities (e.g., improved access to resources, reduced pollution).

**Social Inclusion:** Enhanced access to products or services for marginalised groups.

Health & Safety: Improvements in worker health and safety



SDGs in general









# Economic Viability factors

### **Key Economic Factors:**

Revenue Streams: Diversification of revenue sources (e.g., sales, service fees, leasing).

**Scalability:** Ability to expand operations and increase revenue without significant increases in costs.

Profitability: Profit margins and return on investment (ROI).

Cost Savings: Reduced costs through resource efficiency, waste reduction, and optimised supply chains.







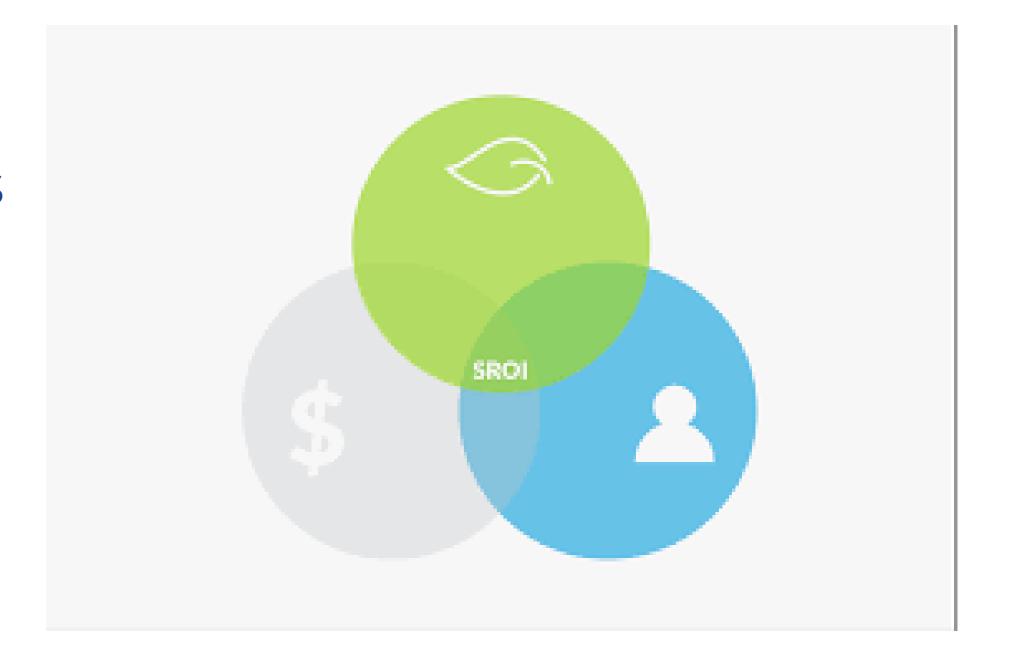




# Integration of multi-dimensional metrics

**Key Integrated Multi-Dimensional Metrics:** SROI (Social Return on Investment): Monetises social and environmental benefits alongside economic returns.

Integrated Reporting: Combine financial and non-financial (ESG) performance in a single report.





**Innovative** 







# Model selection criteria for different project types

- EuroMed characteristics enabling business models
- Sectoral Considerations: Marine,
   Agri-Food, Industry, Resources
- Regional and Local Context Factors
- Technological Readiness
- Stakeholder Engagement & Acceptability
- Selection criteria









# General Euro-Med area considerations: policies

**EU Policy Alignment**: Projects should align with EU policies and regulations related to climate change, circular economy, and sustainable development.

All models shall comply with EU directives on climate change, circular economy, and sustainable development.

**Example**: Projects that align with the EU Green Deal, Circular Economy Action Plan, or Marine Strategy Framework Directive may have a higher chance of securing funding and regulatory support.









# General Euro-Med area considerations: climate

Climate Change Vulnerability: The Euro-Mediterranean (Euro-MED) region is highly vulnerable to the impacts of climate change, including rising sea levels, droughts, heatwaves, and extreme weather events. Sectoral considerations should prioritise models that build resilience to these climate risks.

- Favour business models that promote resilience and adaptation.
- **Example**: In coastal areas, models emphasising coastal protection, restoration of natural barriers (mangroves, wetlands), or relocation of vulnerable infrastructure might be prioritised over those focusing solely on resource efficiency. For agriculture, drought-resistant crops or water-efficient irrigation systems become









# General Euro-Med area considerations: resources

**Resource Scarcity**: Many parts of the Euro-MED region face water scarcity, land degradation, and limited access to raw materials.

- Favour models that maximise resource efficiency and minimise waste.
- **Example**: In agriculture, closed-loop systems that recycle nutrients and water are preferred. In manufacturing, models that use recycled or renewable materials take priority over those that rely on virgin resources.







## General Euro-Med area considerations: economies

**Economic Disparities**: There are significant economic disparities between and within countries in the Euro-MED area

- Prioritise models that promote inclusive growth and create economic opportunities for marginalised communities.
- **Example**: Models that support local SMEs, create green jobs, or provide affordable access to essential products/services (e.g., repair services, shared mobility) may be favoured over those that primarily benefit large corporations.







# General Euro-Med area considerations: culture/tourism

**Cultural Heritage & Tourism**: The Euro-MED region has a rich cultural heritage and a thriving tourism industry. Sectoral considerations should protect and enhance these assets.

- Favour models that protect and enhance cultural heritage, promoting sustainable tourism practices.
- **Example**: Models that support eco-tourism, promote local crafts and traditions, or reduce the environmental impact of tourism (e.g., waste management in tourist areas, sustainable transportation) are more likely to be successful.





### MODEL SELECTION CRITERIA: EUROMED CHARACTERISTICS

### MARINE

Climate adaptation, Pollution control

Sustainable fisheries, Eco-tourism

Coastal communities, Heritage preservation

### **AGRI-FOOD**

Water efficiency, Soil regeneration

Local production, Diversification

Food security, Rural development

### INDUSTRIAL

Green manufacturin g, Emissions reduction

Circular supply chains, Resource efficiency

Skills training, Job creation

### RESOURCES

Waste infrastructure, Pollution prevention

Secondary markets, Material valorisation

EPR schemes, Regional cooperation











# Key Regional and Local context factors

These **significantly shape** the suitability and effectiveness of circular economy business models. **Failing to account for these factors can lead to models that are impractical, unsustainable, or socially unacceptable** 

- Resource Availability and Accessibility:
- Existing Infrastructure and Waste
   Management Systems:
- Regulatory Environment and Policy Landscape

- Cultural Norms and Consumer Behaviour:
- Economic Structure and Industry
   Composition:
- Social Equity and Community Needs:
- Technological Capacity and Skills









# When Defining Boundaries and Selecting a BM

**Scope and Scale:** Determine the geographic scope of the project and the scale of the targeted impact. Is it a local, regional, or national initiative? Is it focused on a specific industry or sector?

**Stakeholder Engagement:** Engage with key stakeholders (businesses, communities, government agencies) to understand their needs, priorities, and perspectives.

**Data Collection and Analysis:** Gather data on local resource flows, waste generation, consumption patterns, and economic activities to inform business model design.

Flexibility and Adaptability: Design circular business models that are flexible and adaptable to changing conditions and local contexts.

**Policy Alignment:** Ensure that the chosen business model aligns with local and regional policies and regulations.

**Community Ownership:** Promote community ownership and participation in circular initiatives to ensure long-term sustainability and social acceptance.









# Technology Readiness

### The core technology must work → at TRL 9

### **Key Considerations:**

Availability: How available it is for your organisation / project?

Affordability: What is the cost?

Complexity: How complex is the technology?

**Integration**: Can this new technology integrate into other processes and be scaled to other initiatives?







### MODEL SELECTION CRITERIA: STAKEHOLDERS ENGAGEMENT

# Stakeholder Engagement & Acceptability

Stakeholders' engagement shall be mapped.

### **Key Considerations:**

**Stakeholder mapping:** Define key stakeholders from all locations.

Impact assessment (benefits): What are the economic, societal, or environmental impacts for each of the categories?

Knowledge transfer: How do key stakeholders improve

knowledge of sustainability?

Feedback mechanisms: Is there a sound system to provide

feedback?

INFLUENCE/
POWER
OF
STAKEHOLDERS

STAKEHOLDER ENGAGEMEI
ASSESSMENT MATRIX

High Power, Less Interested

**KEEP SATISFIED** 

Ensure support without overwhelming

Low Power, Less Interested

MONITOR

Stay alert to changes in status High Power, Highly Interested

**ENGAGE CLOSELY** 

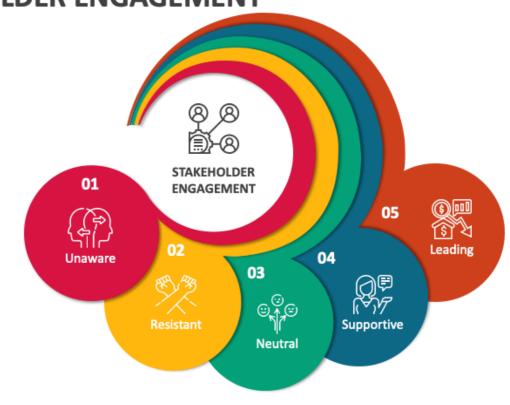
Maintain support & gain key insights

Low Power, Highly Interested

**KEEP INFORMED** 

Use interest for feedback & positive PR

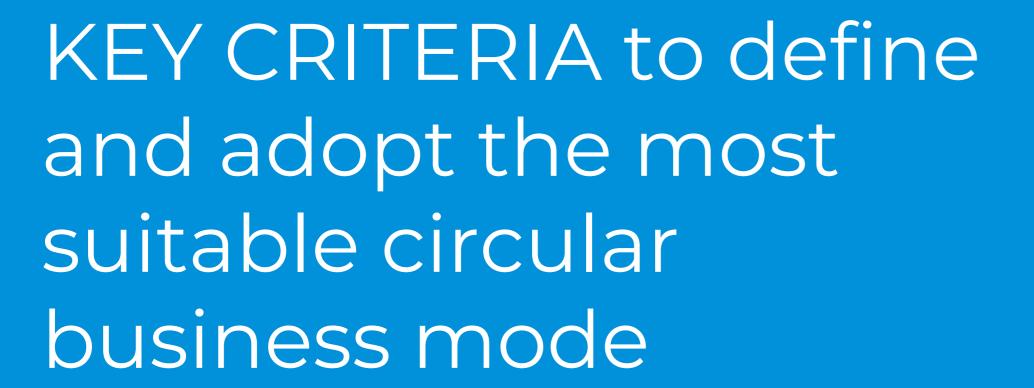
### STAKEHOLDER ENGAGEMENT













- I. Strategic Alignment & Feasibility
- II. Environmental & Social Impact:
- III. Operational & Technical Considerations:
- IV. Risk and Adaptability







### **CRITERIA CHECKLIST - STRATEGIC ALIGNMENT & FEASIBILITY**



	Key Questions	Assessment Method
Strategic Fit	<ul> <li>→ Does the model align with organizational mission, values, and strategic goals?</li> <li>→ Does it complement existing activities?</li> </ul>	Qualitative assessment, Internal alignment review, Stakeholder feedback
Resource Availability & Capabilities	<ul> <li>→ Are necessary resources available (financial, human, technological)?</li> <li>→ Do we have required expertise, infrastructure, partnerships?</li> </ul>	Resource inventory, Gap analysis, Capability assessment
Market Demand & Viability	<ul> <li>→ Is there sufficient market demand?</li> <li>→ Who is the target audience?</li> <li>→ What are their needs?</li> </ul>	Market research, Customer surveys, Competitor analysis, Demand forecasting
Value Proposition Alignment	→ Does the model improve environmental and social responsibility alignment?	Stakeholder value analysis, Impact alignment assessment
Scalability & Profitability  111	<ul> <li>→ Can the model scale to larger markets?</li> <li>→ Is it profitable long-term?</li> </ul>	Financial projections, Sensitivity analysis,  ROI calculations  Innovative sustainable economy  The projections of the English

### **CRITERIA CHECKLIST - ENVIRONMENTAL & SOCIAL IMPACT**



	Key Questions	Assessment Method
Environmental Impact Reduction	→ How effectively does the model reduce environmental impacts vs. linear models?	Life Cycle Assessment (LCA), Carbon footprint analysis, Waste reduction metrics, Resource efficiency indicators
Social Value Creation	→ Does the model create positive social value (jobs, community development, health improvements)?	Social Return on Investment (SROI), Stakeholder surveys, Impact assessments
Stakeholder Acceptability & Ethics	<ul> <li>→ Is the model acceptable to key stakeholders?</li> <li>→ Does it align with ethical principles?</li> </ul>	Stakeholder surveys, Focus groups, Ethical audits, Compliance checks
Policy Compliance	<ul> <li>→ What current and future regulations apply?</li> <li>→ Is there a clear compliance path?</li> </ul>	Regulatory review, Compliance audits, Legal assessment
<b>Environmental Impact Reduction</b>	→ How effectively does the model reduce environmental impacts vs. linear models?	Life Cycle Assessment (LCA), Carbon footprint analysis, Waste reduction metrics, Resource efficiency indicators







### **CRITERIA CHECKLIST - OPERATIONAL & TECHNICAL CONSIDERATIONS**



	Key Questions	Assessment Method
Technical Feasibility	→ Are necessary technologies and infrastructure available for effective implementation?	Technology Readiness Level (TRL), Infrastructure assessment, Cost-benefit analysis
Supply Chain Robustness	→ Is the supply chain reliable and resilient to disruptions (material shortages, disasters)?	Risk assessment, Supplier diversification metrics, Contingency planning
Reverse Logistics	→ Is there a reliable, cost-effective system for collecting and processing used products/materials?	Cost per unit analysis, Collection rates, Processing capacity assessment
Data Management	→ How will data be tracked, monitored, and managed throughout the model lifecycle?	Data systems assessment, Sharing protocols, Management model design
Technical Feasibility	→ Are necessary technologies and infrastructure available for effective implementation?	Technology Readiness Level (TRL), Infrastructure assessment, Cost-benefit



analysis







Key Questions	Assessment Method

### **Risk Assessment**

→ What are potential risks (market, regulatory, technology, operational)? How likely and severe? Risk register, Probability/impact matrix, Mitigation plans

# Flexibility & Adaptability

→ How adaptable is the model to changing market conditions, technology advances, and regulations?

Scenario planning, Sensitivity analysis, Agility assessments





### **KEY CRITERIA**



# Operative steps

- 1. Assess the project/organisation against each of these criteria.
- 2. Assign scores (quantitative or qualitative) based on the measurement guidelines.
- **3. Prioritise** models that score highly across all key areas (strategic alignment, environmental impact, social value, operational feasibility, risk mitigation).
- 4. Continuously **monitor** and track performance against these criteria to ensure ongoing success and adapt to changing conditions.







# Basic selection checklist

- How to build a checklist
- SIMPLIFIED
- Example table
- Preliminary indications for TPs







# Strategic Alignment

### Criterion: Strategic Fit.

Description: How well does the circular business model align with the organisation's mission, values, and overall strategic goals? Does it complement existing activities or require significant deviations?

### **Evaluation Scale:** 1-5

- 1: Completely Misaligned The model clashes with core business principles.
- 2: Weak Alignment Requires major adjustments in vision and values
- 3: Moderate Alignment Requires a change in long-term goals to implement.
- 4: Strong Alignment Complements the mission and some key objectives.
- 5: Excellent Alignment A model in service of the company ´s primary strategy and vision.

Guidance: Rate according to the potential conflicts with existing operations.

Potential Metrics to Achieve: Score above 3; a business model should not force an organisation to alter its long-term goals significantly.







# Strategic Alignment

### Resource Availability & Capabilities

Description: Does the organisation have the necessary resources (financial, human, technological) and capabilities (expertise, infrastructure, partnerships) to implement the proposed circular business model?

### **Evaluation Scale:**

- 1: Deficient: Lacks essential resources; significant acquisition needed
- 2: Limited: Some resources available, but not sufficient for the long term.
- 3: Adequate: Most resources and skills are in place, but will require more assistance.
- 4: Extensive: Has strong foundations, but with minor adjustments and skills already in place.
- 5: Excellent: Has strong, relevant, and readily available support to support the model entirely.

Guidance: Assess the level of internal and external acquisition needed to make the model sustainable over time.

Potential metrics to achieve: Score 4-5, indicating existing infrastructure.





# Environmental and Social Impact

### **Environmental Impact Reduction**

Description: How efficiently does the circular business model reduce environmental impacts compared to traditional linear models?

### **Evaluation Scale**

- 1: Increased Impact: Has a negative impact on most environmental areas
- 2: Incidental Reduction: It reduces some impacts, but it is not meaningful
- 3: Moderate Reduction: reduces the impact with some effort and focus on current issues.
- 4: Significant Reduction: The impact is significant with little change to the current system.
- 5: Transformative Reduction: Potential to reverse long-term damage in the environment.

Guidance Rate according to the effect the model has on major current problems.

Potential Metrics To Achieve. The environmental area should be equal to or higher than 3; having a score of 4-5 ensures long-term support from investors.

Innovative | Interreg | Co-fu

sustainable economy



# Environmental and Social Impact

### **Social Value Creation**

Description: Does the circular business model create positive social value (e.g., job creation, community development, improved health)?

Evaluation Scale\*

- 1: Negative Social Impact: could have a negative or exploitative effect on the community
- 2: Socially Neutral: There are social benefits or harm.
- 3: Limited Benefits: positive or improved effects that require community commitment.
- 4: Improves Social Equity: Provides a fair and easy benefit for social improvement.
- 5: Systemic transformation: Provides a fair and scalable system that allows the community to improve their quality of life.

Guidance. Assess how the model improves aspects related to equality.

Potential Metrics To Achieve. It should be equal to or higher than 3, but if there are low resources or a clear strategy, it can benefit from 2.





# Operational and Technical

### **Technical Feasibility**

Description: Are the necessary technologies and infrastructure available to implement the circular business model effectively?

### **Evaluation Scale**

- 1: Non-Feasible: High cost in development, resources and innovation.
- 2: Emerging Technology: Limited success in a long-term investment.
- 3: Moderate: requires small expertise and technology.
- 4: Readily Available: Only available for some places and people, and has very little adaptation.
- 5: Readily Available for deployment and replication in other areas.

Guidance. Evaluate the feasibility of deploying technology in the area.

Potential Metrics To Achieve. The feasibility must be at least 3.



**Innovative** 

sustainable economy



# Operational and Technical

### **Supply Chain Robustness and Resilience**

Description. Is the supply chain reliable and resilient to disruptions (e.g., material shortages, natural disasters)?

**Evaluation Scale** 

- 1: Highly Vulnerable: Depends of few resources to operate, and can be impacted by a lot of factors.
- 2: Mostly Reliable: Some resources comes from very reliable sources, but not on a day-to-day scale.
- 3: Medium: Is reliable most of the time, but can suffer from the weather or economic conditions
- 4: High: Sources are multiple, and there is good plan, but can still suffer from strong circumstances, or difficult regulations.
- 5: Dependable: There is a diverse network of source and alternatives for potential problems, both national and internationally.

Guidance. Check for possible dependencies.

Describe than 3. Innovative sustainable economy





# Risk & Adaptability

### **Risk Assessment**

Description. What are the potential risks associated with the circular business model (e.g., market risks, regulatory risks, technology risks)?

### **Evaluation Scale**

- 1: High Risk: There are a lot of concerns.
- 2: Considerable Risk: Some key components can fall anytime.
- 3: Moderate: Most systems work and there are no known, big problems.
- 4: Low risk: Almost all known and unknown risks are controlled.
- 5: Negligible risk: All risks are known, and have counter actions in all areas.

Guidance. Account for all areas to work.

Potential Metrics To Achieve. It should be equal or higher than 3.







# Risk & Adaptability

### **Flexibility and Adaptability**

Description. How adaptable is the circular business model to changing market conditions, technological advancements, and regulatory requirements?

### **Evaluation Scale**

- 1: Rigid: Cannot adapt to any change or has a very high cost.
- 2: Limited: Can adapt only to a specific type of problem, or after resources are exhausted.
- 3: Moderately Flexible: Can change and adapt to new conditions, but needs external help or a push.
- 4: Highly Adaptive: Easily implemented and needs little support from outside.
- 5: Fluid: It is an easy, self-adjusting system that needs no support to implement changes and evolve constantly.

Guidance. Rate how much the plan can change, and what is needed to implement those changes.

Potential Metrics To Achieve\* \* It should be equal to or higher than 4.









### **BASIC SELECTION CHECKLIST**

Criterion	Weight	BM option 1	Score	BM option 2	Score
		I. Strategic Alignment			
1. Strategic Fit	[1-5]	[Qual: Excellent, Good, Fair, Poor]	[1-5]	[Qual: Excellent, Good, Fair, Poor]	[1-5]
		II. Environmental & Social Im	pact		
2. Environmental Impact Reduction	[1-5]	[Qual: Excellent, Good, Fair, Poor]	[1-5]	[Qual: Excellent, Good, Fair, Poor]	[1-5]
3. Social Value Creation	[1-5]	[Qual: Excellent, Good, Fair, Poor]	[1-5]	[Qual: Excellent, Good, Fair, Poor]	[1-5]
		III. Operational & Technic	al		
4. Technical Feasibility	[1-5]	[Qual: Proven, Partially Proven, Unproven]	[1-5]	[Qual: Proven, Partially Proven, Unproven]	[1-5]
5. Supply Chain Robustness	[1-5]	[Qual: High, Medium, Low Risk]	[1-5]	[Qual: High, Medium, Low Risk]	[1-5]
		IV. Risk & Adaptability			
6. Risk Assessment	[1-5]	[Qual: High, Medium, Low Risk]	[1-5]	[Qual: High, Medium, Low Risk]	[1-5]
7. Flexibility and Adaptability	[1-5]	[Qual: High, Medium, Low Adaptability]	[1-5]	[Qual: High, Medium, Low Adaptability]	[1-5]
		Calculated Subtotals:			
Subtotal. I		Weight x Score		Weight x Score	
Subtotal. II		Weight x Score		Weight x Score	
Subtotal. III		Weight x Score		Weight x Score	
Subtotal. IV		Weight x Score		Weight x Score	
Overall Total Score:		[∑ Subtotals]	BM1	[∑ Subtotals]	BM2

### PRELIMINARY IDEA FOR PROJECTS IN THE SECTOR "MARINE RESOURCES" (1/2)



Project	BM family	Leverages on	Emphasis
SPOWIND	Circular Design & Eco- Innovation	uptake of new offshore wind technologies.	energy planning, aiming sustainable energy solutions.
2B-BLUE	Knowledge Sharing & Collaborative Platforms	A community to promote new forms of collaboration	Alliances to boost the BBt sector with experimental collaboration.
AZA4ICE	Circular Design & Eco- Innovation		design based on spatial allocation for inclusive innovation





### PRELIMINARY IDEA FOR PROJECTS IN THE SECTOR "MARINE RESOURCES" (2/2)



Project	BM family	Leverages on	Emphasis
BLUE ECOSYSTEM	Knowledge Sharing & Collaborative Platforms	sharing experiences at a transnational level	innovation through co- creation and mutual learning
AquaBioNets	Product Life Extension & Service-Based Models	transfer smart innovative technologies, and LLabs	Sustainable materials, biobased innovation
RECONNECT	Resource Optimisation & Industrial Symbiosis	and craft sectors to	Social-driven, promoting collaboration between traditional industries and creative sectors to valorise waste





### PRELIMINARY IDEA FOR PROJECTS IN THE SECTOR "AGRI-FOOD SYSTEMS"



Project	BM family	Leverages on	Emphasis
Clepsydra	Smart & Sustainable Supply Chains	improving groundwater quality in agriculture and irrigation activities.	Tech-driven water management.
OliveOilMedNet	Knowledge Sharing & Collaborative Platforms	Validating eco- friendly cultivation techniques and authenticity certification models.	Quality and Sustainability certification
CARBON FARMING MED	Smart & Sustainable Supply Chains	Carbon farming as an enabler to obtain additional revenues	Uses carbon credits to incentivise farmers to adopt regenerative practices.





### PRELIMINARY IDEA FOR PROJECTS IN THE SECTOR "INDUSTRIAL TRANSITION" (1/2)



Project	BM family	Leverages on	Emphasis
GREENSMART MED	Knowledge Sharing & Collaborative Platforms	Turns SMEs' sustainability challenges into development opportunities	SME support and regional economic development.
ProcuraMED	Knowledge Sharing & Collaborative Platforms	Technology transfer, SMEs' innovation capacities, and empowers PAs	Green procurement, facilitating SME innovation and tech transfer.
REVIVE	Knowledge Sharing & Collaborative Platforms		territorial innovation and digital innovation hubs





#### PRELIMINARY IDEA FOR PROJECTS IN THE SECTOR "INDUSTRIAL TRANSITION" (2/2)



Project	BM family	Leverages on	Emphasis
CircleMED	Circular Design & Eco- Innovation	scaling up circular approaches adaptable to any kind of territory.	Adaptability and scalability of circular solutions
BIOSTRARS	Circular Design & Eco- Innovation	social driven innovation in rural areas	Systemic support for Bioeconomy.
S.o.l.e.MED	Knowledge Sharing & Collaborative Platforms	boost Open Innovation, and training models	Youth entrepreneurship in Bioeconomy, urban collaborative spaces.





#### PRELIMINARY IDEA FOR PROJECTS IN THE SECTOR "RESOURCES VALORISATION" (1/2)



Project	BM family	Leverages on	Emphasis
eWAsTER	Resource Optimisation & Industrial Symbiosis	uses waste as a secondary raw material resource	preventing water pollution from e-waste and promoting local resource valorisation
VERDEINMED	Circular Design & Eco- Innovation	providing a set of principles to guide policy makers, businesses and consumers.	User-centric innovation with closing the textiles loop.





#### PRELIMINARY IDEA FOR PROJECTS IN THE SECTOR "RESOURCES VALORISATION" (1/2)



Project	BM family	Leverages on	Emphasis
REPper	Product Life Extension & Service-Based Models	increasing repair skills, and transitioning to more sustainable consumer choices	changing consumer behaviours through skill- building and SME support
CirBioWaste	Resource Optimisation & Industrial Symbiosis	strategy and action plan oriented	Adaptive management of biowaste, focusing on tailored solutions rather than a one-size-fits-all approach.









#### EMBRACE Circular Business Model Toolkit

- The EMBRACE Circular Business Model Toolkit project was an initiative, likely supported by Interreg MED Green Growth, that developed a user-friendly instrument for SMEs and intermediary organizations in the agro-food and wine sectors to transition to a circular economy.
- The toolkit provides 18 tools based on existing methods to help businesses redefine their business models and ecosystems for greater sustainability and resource efficiency
- https://embrace.t2i.it/moodle/?lang=en









#### Interactive Assessment – Part II

- Q. List the most difficult parameters to be measured in your project
- Q. Which criteria do you think are more difficult to define in your project?
- Q&A











unded by European Union

## 03.

## Investment readiness









# Funding landscape and investment opportunities

Private sector and Impact investors

Blended finance approaches

Green bonds, Social impact bonds, etc.

Steps needed









### Private Sector and Impact Investors

- Investors recognise the potential for both financial returns and positive environmental and social impact.
- Venture capital firms, angel investors, and corporate sustainability funds are actively seeking out and funding **innovative circular business models**.
- These investors are often drawn to companies that can demonstrate a clear path to profitability while also addressing pressing sustainability challenges.
- CE investments align with the **growing trend of ESG** (Environmental, Social, and Governance) investing, making them attractive to a wider range of institutional and

individual investors focused on long-term value creation."







#### Private Sector and Impact Investors

#### It depends on the maturity level of the CE initiative

**Venture Capital**: Invest in early-stage circular startups with high growth potential (e.g., new recycling technologies, innovative material solutions).

**Angel Investors:** Provide seed funding and mentorship to circular entrepreneurs with promising ideas (e.g., local repair services, upcycling businesses).

Corporate Sustainability Funds: Invest in circular solutions that align with a corporation's sustainability goals and create strategic value (e.g., closed-loop supply chains, waste reduction technologies).









## (few) Examples of VC, AI, CSF in EU and Med area

Venture Capital Funds	Angel Investors/Networks	Corporate Sustainability Funds
Demeter Investment Managers (France)	European Business Angel Network (EBAN)	Danone Manifesto Ventures (France)
SHIFT Invest (Netherlands, with	Investiere (Switzerland)	Unilever Ventures (UK)
activities in Southern Europe) Circular Innovation Fund (Europe/Global)	Cleantech Business Angels (Various Locations) Individual Angel Investors	Volvo Cars Tech Fund (Sweden) Michelin Corporate Venture (France)
Emerald Technology Ventures (Switzerland)		Enel Green Power (Italy)
Planet A Ventures (Germany		
Sofinnova Partners (France		









#### Blended Finance

- Blended finance leverages public and philanthropic funds to de-risk investments in the circular economy and attract private capital. By providing concessional loans, guarantees, or equity, public and charitable sources can reduce the perceived risk for private investors, making circular projects more attractive.
- This approach is particularly useful for projects with high upfront costs, long payback periods, or uncertain revenue streams.
- Blended finance enables a greater flow of capital into circular economy initiatives, accelerating the transition to a more sustainable and resilient economy."





**Innovative** 





#### Blended Finance

**Concessional Loans**: Loans with below-market interest rates or extended repayment terms to reduce the cost of capital.

**Guarantees**: Public or philanthropic entities guarantee a portion of the investment, reducing the risk of loss for private investors.

**Equity Investments**: Public or philanthropic entities invest equity alongside private investors, sharing the risk and potential rewards.







## (few) Examples of BF instruments in EU and Med area

#### **Concessional Loans** EIB Green Loan: EIB (lender), Public Transportation Company (borrower), City Government (beneficiary).

#### Économie Circulaire (Circular Economy Loan): Bpifrance (lender), French SMEs (borrowers).

**Bpifrance Prêt** 

#### **EIF InnovFin Guarantee** for Innovative SMEs: EIF (guarantees a portion of the loan, reducing the bank's

Guarantees

risk), Commercial Bank (lender), Innovative SME (borrower).

**EFSI Guarantee** for Energy Efficiency Investments: EFSI (guarantees a portion of the investment fund's portfolio, reducing the risk of losses.), Investment Fund (investor), **Building Owners** (beneficiaries).

#### **Equity Investments**

**ECBF Investment** in a Sustainable Packaging Company: ECBF (invests equity alongside private investors, sharing the risk and potential rewards.), Sustainable Packaging Company (recipient), Private Investors (coinvestors).

LIFE Programme Investment in a Water Treatment Technology Firm: LIFE Programme (invests equity alongside private investors, providing capital for scaling up the technology), Water Treatment Technology Firm (recipient), Private Investors (co-investors).









#### Innovative Financial Instruments

A range of innovative financial instruments is emerging to support circular economy projects and unlock new sources of capital.

**Green** bonds, **Social impact** bonds, and **Crowdfunding** platforms are enabling circular businesses to access funding from a wider range of investors, including those seeking both financial and social returns.

These instruments can help **overcome traditional barriers** to investment and accelerate the adoption of circular economy principles across various sectors."







#### Innovative Financial Instruments

**Green Bonds:** Bonds issued to finance environmentally friendly projects, including circular economy initiatives.

**Social Impact Bonds** (SIBs): Performance-based contracts where investors provide upfront capital for social programs, and governments or foundations repay the investors if the programs achieve pre-defined social outcomes (e.g., waste reduction, job creation).

**Crowdfunding Platforms**: Online platforms that allow circular businesses to raise capital from a large number of individuals (e.g., Kickstarter, Indiegogo).







#### **FUNDING LANDSCAPE AND INVESTMENT OPPORTUNITIES**



## (few) Examples of bonds and CF in EU and Med area

#### **Green Bonds**

**Iberdrola (Spain**): Financing the development of new renewable energy projects and upgrading electricity distribution networks to improve efficiency and reduce carbon emissions.

Snam (Italy): Financing projects that reduce energy consumption, promote the use of renewable energy sources, and support the transition to sustainable mobility. Republic of France: Financing climate-friendly projects and expenditure.

#### Social Impact Bonds (SIBs)

Peterborough SIB (UK): Ministry of Justice (payer), Social Finance Ltd (intermediary), Investors (provide upfront capital), Service Providers (deliver rehabilitation programs).

**FSE SIB** (Finland): The target group are unemployed people. Investors put money into increasing the chance of getting a job

ABN AMRO (NL) and SITRA (FI) are examples of financial organisations that offer support to set up SIBs, and they also invest in SIBs themselves

#### **Crowdfunding Platforms**

**Ulule** (France): hosts numerous campaigns for eco-friendly and sustainable products, as well as social and cultural projects.

**Goteo** (Spain): focused on funding social and cultural projects with a strong emphasis on sustainability and community impact.

**Kickstarter** and **Indiegogo** (Global platforms with a strong European presence) host numerous campaigns for circular economy startups and sustainable products.











## Steps needed to access private funds

**Develop a Compelling Business Plan:** Create a detailed business plan that outlines your business model, value proposition, target market, competitive advantages, financial projections, and management team. For circular economy projects, emphasise the environmental and social impact.

**Build a Strong Team:** Assemble a skilled and experienced team with relevant expertise in the industry, business management, and sustainability (if applicable).

**Protect any Intellectual Property:** Secure patents, trademarks, or copyrights to protect your innovative technologies or business models.







## Access to Equity-Based Financing (VC, AI, CSF, EI) - 1

- 1. Research and Identify Target Investors whose investment focus, geography, and values align with your project. (Investment stage (seed, early-stage, growth-stage), Industry focus (e.g., circular economy, cleantech, foodtech), Geographic focus (Europe, Mediterranean), Investment size and terms
- 2. Prepare a Pitch Deck and Investment Materials that highlight your business opportunity, value proposition, financial projections, and management team. Prepare additional investment materials, such as a term sheet and due diligence documents. (Problem statement and solution, Market opportunity and competitive landscape, Business model and revenue projections, Management team and advisors, Investment highlights and ask)









## Access to Equity-Based Financing (VC, AI, CSF, EI) - 2

- 3. Network and Pitch to Investors: Attend industry events, connect with investors through networking, and submit your pitch deck to potential investors (Attend industry conferences and pitch competitions, Network with angel investors and venture capitalists, Engage with mentors and advisors)
- **4. Negotiate Investment Terms.** In case you receive an offer, carefully negotiate the terms of the investment agreement, including valuation, equity stake, board representation, and exit strategy. (Valuation, Equity stake, Board seats and control, Liquidation preferences)
- 5. Due Diligence and Closing will be carried out by the investor(s) to verify the information in your business plan and assess the risks and opportunities of your project. Once due diligence is complete, the investment will be finalised, and funds will be transferred.









## Debt-Based Financing (Concessional Loans, Green Bonds)

- 1. Identify Lending Institutions or Bond Issuers: Research banks, development finance institutions, or other organisations that offer concessional loans or issue green bonds for circular economy or sustainable projects.
- 2. Review Eligibility Criteria and Application Requirements: Understand the specific financing program's eligibility criteria, loan terms, interest rates, and application requirements.
- **3. Prepare a Loan Application or Bond Prospectus:** Develop a detailed loan application or bond prospectus that outlines your project's objectives, financial projections, and environmental and social impact.
- 4. Negotiate Loan Terms or Bond Pricing: Negotiate the terms of the loan agreement or the pricing of the green bond with the lending institution or underwriter.
- **5. Due Diligence and Closing:** The lender or underwriter will conduct due diligence to assess the risks and opportunities of your project. Once due diligence is complete, the loan will be finalised, or the green bond will be issued.









## Access to Guarantees (banks)

- 1. Identify Guarantee Providers and Lending Institutions: Research organisations (e.g., EIF, national guarantee agencies) that provide guarantees to reduce the risk of lending for sustainable projects. Identify banks or other financial institutions that offer loans backed by these guarantees.
- 2. Apply for a Loan with a Guarantee: Apply for a loan with a guarantee from a participating financial institution. The lender will assess your project and submit an application to the guarantee provider for coverage.
- 3. Negotiate Loan Terms and Guarantee Coverage: Negotiate the terms of the loan agreement with the lender and ensure that the guarantee coverage is adequate to mitigate the risks of your project.
- **4. Due Diligence and Closing:** Both the lender and the guarantee provider will conduct due diligence to assess your project. Once due diligence is complete, the loan will be finalised, and the guarantee will be issued.







## Access to Guarantees (banks)

- 1. Identify Guarantee Providers and Lending Institutions: Research organisations (e.g., EIF, national guarantee agencies) that provide guarantees to reduce the risk of lending for sustainable projects. Identify banks or other financial institutions that offer loans backed by these guarantees.
- 2. Apply for a Loan with a Guarantee: Apply for a loan with a guarantee from a participating financial institution. The lender will assess your project and submit an application to the guarantee provider for coverage.
- 3. Negotiate Loan Terms and Guarantee Coverage: Negotiate the terms of the loan agreement with the lender and ensure that the guarantee coverage is adequate to mitigate the risks of your project.
- **4. Due Diligence and Closing:** Both the lender and the guarantee provider will conduct due diligence to assess your project. Once due diligence is complete, the loan will be finalised, and the guarantee will be issued.







#### Access to Social Impact Bonds

- Engage with Government or Foundation Payers: identify government agencies or foundations that are interested in funding innovative solutions to social or environmental problems.
- 2. Develop a SIB Proposal: develop a detailed SIB proposal that outlines the problem you are addressing, the target outcomes, the intervention strategy, the impact metrics, and the proposed payment structure.
- **3. Secure Investors:** identify social investors who are willing to provide upfront capital for your project.
- **4. Negotiate SIB Terms:** SIB agreement with the government or foundation payer, the investors, and the service providers.
- 5. Implementation and Outcome Measurement: implement your project and track its performance against the agreed-upon outcome metrics.







#### Access to Crowdfunding platforms

Choose a Crowdfunding Platform: Select a crowdfunding platform that aligns with your project and target audience (e.g., Kickstarter, Indiegogo, Ulule, Goteo).

**Develop a Compelling Campaign:** Create a compelling campaign page that tells your story, explains your project, and offers attractive rewards to backers.

**Set a Funding Goal and Timeline:** Determine the amount of funding you need and the length of your campaign.

**Promote Your Campaign:** Utilise social media, email marketing, press releases, and other channels to effectively promote your campaign.

**Engage with Backers:** Respond to questions and comments from backers and provide updates on your progress.

**Fulfil Rewards: once your campaign is successful, fulfil** the rewards you promised to your backers.





## Investor expectations & requirements



- Impact Metrics and reporting standards
- Financial Sustainability requirements
- Scalability and Replicability evidence
- Financial planning and risk management
- Governance frameworks







#### **METRICS AND OTHER EVIDENCES FOR INVESTORS**



## Impact Metrics and Reporting Standards

Expectations	Requirements
Clear and Quantifiable Impact Metrics (aligned with the company's value proposition and business model.)	Environmental Impact: Metrics to measure the reduction in environmental impacts, such as: Greenhouse gas emissions (tons of CO2e reduced) Waste diverted from landfills (tons) Water usage (litres saved), Resource depletion (reduction in virgin materials used)  Social Impact: Metrics to measure the positive social impact, such as: Job creation (number of new jobs created), Community development (number of people served), Improved health outcomes (reduction in health risks)
Credible Measurement Methodologies (Life Cycle Assessment (LCA), Social Return on Investment (SROI), or other	Establishing data collection procedures: Implementing data management systems: Ensuring data quality and accuracy Implement quality controls.
Regular and Transparent Reporting (company's impact performance)	Comply with recognized sustainability reporting standards, such as the Global Reporting Initiative (GRI) or the Sustainability Accounting Standards Board (SASB).









## Financial Sustainability Requirements

Expectations	Requirements
Demonstrated Revenue Model Viability. (verifiable financial viability.)	<ul> <li>Detailed revenue projections that are based on clear assumptions and market data.</li> <li>Cost analysis that demonstrates the efficiency of resource use and waste reduction.</li> <li>Cash flow projections that show the company's ability to manage its finances and meet its obligations.</li> </ul>
Efficient Use of Capital. (use the invested capital with high value outcomes)	<ul> <li>Customer acquisition cost (CAC)</li> <li>Customer lifetime value (LTV)</li> </ul>
Long-Term Perspective (commitment to financial sustainability	<ul> <li>Use of funds: Description of capital.</li> <li>Capital structure: Description of debt and equity.</li> </ul>





## Scalability and Replicability Evidence

Expectations	Requirements
Large Market Potential: Investors expect to see a sizable and growing market for the company's products or services.	<ul> <li>Market size and growth rate: Statistics on market potential.</li> <li>Competitive landscape: Describe alternative products.</li> </ul>
Scalable Business Model: Can the business easily replicate the services?	<ul><li>Operations plan</li><li>Funding requirements</li></ul>
Replicable in New Markets: Does the business scale or replicate the approach to new areas?	Market entry strategy





## Financial Planning

Expectations	Requirements
Clear and Realistic Projections (demonstrate the potential for profitability and return on investment (ROI)	<ul> <li>Revenue projections: Sales forecasts, pricing assumptions, customer acquisition costs.</li> <li>Cost of goods sold (COGS), labour costs, and</li> </ul>
Understanding of Circular Economics (evidence CE principles translate into financial benefits)  Unit Economics Visibility (economics of	<ul> <li>manufacturing overhead, Operating expenses.</li> <li>Capital expenditures (CAPEX), Cash flow projections, Sensitivity analysis.</li> </ul>
the core value proposition.)	Revenue growth rate, Gross profit margin,  Operating profit margin, Not profit page.
Funding Needs and Use of Funds (articulate the amount of funding needed and how the funds will be used)	<ul> <li>Operating profit margin, Net profit margin</li> <li>Return on equity (ROE), Return on assets (ROA)</li> <li>Customer acquisition cost (CAC), Cost of</li> </ul>
Realistic Valuation. (Justify the company's valuation)	acquiring a new customer, Customer lifetime value (LTV)









# What to do to be appealing to private investors and/or business angels?

Demonstrate potential for financial return, positive impact, and sustainable growth

- Strong Business Model & Market
   Validation
- Financial Performance & Projections
- Impact Measurement & Reporting
- Management Team & Governance
- Risk Mitigation
- Legal & Regulatory Compliance
- Exit Strategy (for Investors)









## Strong Business Model & Market Validation – 1

Clear Value Proposition: Articulate a clear and compelling value proposition that addresses a significant market need and offers a distinct advantage over existing solutions.

Market Size & Growth Potential: Demonstrate a sizable target market with significant growth potential, back up claims with market data and analysis.

**Scalability:** Ability to expand operations and increase revenue without significant increases in costs. Investors look for models that can be replicated in new markets or scaled up efficiently

**Revenue Model Viability**: A well-defined and understandable revenue model that demonstrates how the project will generate income (e.g., sales, service fees, licensing). The model must be realistic and aligned with the market.







## Strong Business Model & Market Validation – 2

**Customer Acquisition Strategy**: A clear and cost-effective strategy for attracting and retaining customers.

**Competitive Advantage**: Identify a sustainable competitive advantage that protects the project from competition (e.g., proprietary technology, unique partnerships, strong brand).

**Minimum Checklist Item**: We have a clearly defined and validated business model with a sustainable revenue stream. (Yes/No)





## Financial Performance & Projections

**Realistic Financial Projections**: Develop realistic financial projections (revenue, expenses, cash flow) for the next 3-5 years. Assumptions should be clearly stated and supported by market research and industry benchmarks.

**Positive Unit Economics**: Demonstrate positive unit economics, showing that each product or service sold generates a profit.

**Path to Profitability**: Outline a clear path to profitability, with specific milestones and timelines.

**Investment Needs & Use of Funds:** Clearly articulate the amount of funding needed, how the funds will be used, and the expected return on investment.

**Efficient Capital Allocation**: Efficient use of capital and resources, with a focus on minimising costs and maximising returns.

Minimum Checklist Item: Our financial projections demonstrate a clear path to profitability within the next 3-5 years. (Yes/No)









### Impact Measurement & Reporting

**Quantifiable Impact Metrics:** Define specific and measurable impact metrics that align with the project's sustainability goals (e.g., reduction in waste, carbon emissions, water usage).

**Data Collection & Reporting**: Establish a system for collecting data and reporting on the project's impact. Transparency is essential.

**Alignment with Standards**: Adherence to recognised sustainability standards and certifications, such as B Corp or ISO 14001.

**Minimum Checklist Item**: We have identified and are tracking quantifiable metrics to measure the social and environmental impact of our project. (Yes/No)





#### MINIMUM REQUIREMENTS FOR ATTRACT PRIVATE INVESTORS AND BUSINESS ANGELS



#### Management Team & Governance

**Experienced Team**: Assemble a skilled and professional management team with relevant expertise in the industry and business management.

Clear Roles & Responsibilities: Define clear roles and responsibilities for each team member.

**Commitment to Sustainability**: A demonstrated commitment to sustainability and ethical business practices.

**Advisory Board (Optional):** Consider establishing an advisory board with industry experts to provide guidance and support.

Minimum Checklist Item: Our management team has relevant experience and expertise to successfully execute our business plan. (Yes/No)









#### MINIMUM REQUIREMENTS FOR ATTRACT PRIVATE INVESTORS AND BUSINESS ANGELS



Co-funded by

the European Union

## Risk Mitigation

Risk Assessment: Identify potential risks and challenges that could impact the project (e.g., market risks, technology risks, regulatory risks).

Contingency Plans: Well-defined contingency plans to address potential disruptions or setbacks.

Insurance Coverage: Adequate insurance coverage to protect against unforeseen events.

Mitigation Strategies: Develop mitigation strategies to address these risks.

Minimum Checklist Item: We have conducted a thorough risk assessment and

have developed mitigation strategies to address potential challenges. (Yes/No) **Innovative** Interreg

sustainable economy

**Euro-MED** 



## Legal and Regulatory Compliance

**Compliance with Regulations**: Ensure full compliance with all applicable legal and regulatory requirements.

**Permitting and Licensing**: Proper permitting and licensing for all activities. **Intellectual Property Protection**: Protect any intellectual property through patents, trademarks, or trade secrets.

Minimum Checklist Item: We are in full compliance with all applicable legal and regulatory requirements. (Yes/No)









## Exit strategy (for investors)

**Potential Exit Options:** Outline potential exit strategies for investors, such as acquisition by a larger company, an initial public offering (IPO), or a sale to another investor.

**Attractive Valuation**: Demonstrate the potential for a strong return on investment based on the project's future growth prospects.

Minimum Checklist Item: We have identified potential exit strategies for investors. (Yes/No)







## Examples of Guarantees/Requests in Practice

**Performance Guarantees**: Investors might require performance guarantees related to waste reduction targets or energy savings.

**Collateral**: Investors might require collateral to secure their investment, such as equipment or property.

**Board Representation**: Investors may want a seat on the board of directors to provide oversight and guidance.

**Covenants**: Investors may include specific covenants in the investment agreement, such as restrictions on debt levels or capital expenditures.









## Qualitative assessment considerations

In addition to the "Yes/No" minimum checklist items, investors are also used to conduct a qualitative assessment of the project, considering factors such as:

Passion and Commitment: The team's passion for and commitment to the project.

Adaptability: The team's ability to adapt to changing market conditions.

Integrity: The team's integrity and ethical business practices.







#### • INVEST-EU

Swappie

INTESA SAN PAOLO

# Case studies and practical examples









## SWAPPIE: Technology without an expiry date

The Finnish company Swappie innovates smartphone refurbishing to reduce carbon emissions, minimise e-waste and conserve critical raw materials.

**The issue**: Europeans bought 130 million new smartphones in 2023. The production of each phone emitted 80 kg of  $CO_2$ . Refurbished smartphones have a 78% lower carbon footprint, but only 25% of pre-owned phones in Europe are resold. That's nearly 98 million smartphones that aren't refurbished—a significant missed opportunity to cut carbon emissions.

SWAPPIE is seizing the opportunity, refurbishing and reselling smartphones to help customers shrink their carbon footprint and embrace the circular economy.







## SWAPPIE: Key leverages

- builds trust by offering warranties of up to three years on refurbished devices
- promoting the environmental benefits of choosing refurbished over new.
- In 2021 alone, Swappie estimates its customers **saved 24,000 tonnes of CO2** equivalent to the carbon captured by nearly 400,000 trees over a decade.
- If only 50% of the smartphones sold in 2023 were refurbished or recycled, Europe could **save or recover 1365 tonnes of cobalt** and 195 tonnes of lithium more than half of the 380 tonnes produced by Europe's largest producer, Portugal, in 2023.









#### SWAPPIE: Investments

- European Investment Bank supported the company with €17 million in venture debt financing, backed by the **Invest EU** programme.
- The loan will support the company's investment in research and development and robotics, helping to make iPhone repairs faster and more reliable. However, for the refurbishing sector to grow, another essential element is missing: communication and behavioural change. According to Eurostat, less than a third of Europeans sell or recycle their old phones, while nearly half keep them in their household.







#### INVEST-EU

- The initiative aims to trigger more than €372 billion in additional investment between 2021 and 2027.
- ~ 100 initiatives co-funded in 2024, with several financial instruments: Equity /
   Quasi-equity, Investment Loan, Framework Loan





#### Intesa San Paolo Green and Social Bond

(report 2024 GSB)

- The total amount of the eligible portfolio analysed is equal to € 2,241 million of outstanding and corresponds to 77 loans financed.
- For each project, Intesa Sanpaolo selected the KPIs on the basis of which it
  evaluated annual emissions avoided. Priority was given to the objectives that can
  be easily quantified in terms of material resources, water and energy.
- Given the heterogeneity of the circular economy projects in general, it is not possible to have a unique set of indicators that applies to everyone.









## Intesa San Paolo Green and Social Bond (2024)

Output indicators	Materials, energy and other output flows	Avoided financed GHG emissions
Amount of recovered materials thanks to product re-design, new business models and/or reverse logistics	52,994 tons	211,632 tCO <sub>2eq</sub>
Increase of renewables energies utilization	61,318 MWh	29,066 tCO <sub>2eq</sub>
Amount of biomethane produced	41,227,422 m³	77,704 tCO <sub>2eq</sub>
Increase of biobased/recycled materials utilization	556,510 tons	399,156 tCO <sub>2eq</sub>
Amount of waste and by-products re-inputted in production processe	739,160 tons	1,029,584 tCO <sub>2eq</sub>
Amount of non wasted food	1,200 tons	1,824 tCO <sub>2eq</sub>
Water saved or recovered	7,721,930 m³	2,032 tCO <sub>2eq</sub>
Amount of fully recyclable goods produced	101,449 tons	201,275 tCO <sub>2eq</sub>
Amount of fully compostable goods produced	467 tons	1,209 tCO <sub>2eq</sub>
Investments in technologies not accountable with KPIs in other CE criteria	267 €M	99,522 tCO <sub>2eq</sub>









## Intesa San Paolo Green and Social Bond (2024)

CE Eligible criteria	Avoided GHG emissions
1) Solutions that extend the product life or cycles of use of goods and/or materials	211,632 tCO <sub>2eq</sub>
2) Production processes fuelled by and/or products made of renewable or recycled resources	505,926 tCO <sub>2eq</sub>
3) Products and/ or services that significantly increase efficiency and effectiveness of the resources consumption, within the company or along its supply chain	1,033,440 tCO <sub>2eq</sub>
4) Design and/ or manufacture products that can be fully recycled or composted within an efficient framework of collection, separation and recycling after use	202,484 tCO <sub>2eq</sub>
5) Innovative technologies to enable circular business models	99,522 tCO <sub>2eq</sub>









### PHOTOVOLTAIC PLAN PROJECT: SPRING Srl

- The project involves the development and construction of a portfolio comprising eight ground-mounted photovoltaic plants with a total nominal power of 41.81 MWp, located in various regions: Calabria (four plants totalling 22.96 MWp), Sicily (three plants totalling 13.55 MWp), and Marche (one plant totalling 5.30 MWp).
- All the photovoltaic systems will be composed of bifacial modules with a monoaxial tracking x-axis. The estimated annual production of the portfolio on a P50 basis is 78,860 MWh, corresponding to 1,886 kWh/kWp.
- All the plants completed and connected to the national electricity grid by June 2025, with a total investment cost of approximately 38.565 million euros.



**Innovative** 





### Interactive Assessment – Part III



- Q. Would you be keen to share project ownership or revenue with other stakeholders, or external investors?
- Q. If your project does not include a task for financial identification, do your partners have the competencies to carry it out?
- Q&A

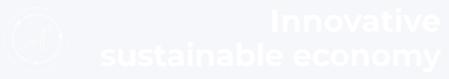
















04.

## Interactive session







#### **SLIDO** and discussion

### Polling interactive session: WOOCLAP

- Q. At the end of the project, will your solution be mature enough to consolidate a business upon?
- Q. Do you believe your project reveals any gaps in defining a solid business plan or making it appealing to private investors?
- Q. Are you aware of any internal or external barriers that could hinder the business implementation of your project?
- Q. In your opinion, what is the biggest challenge in making your CE project investment-ready?



















#### Innovative sustainable economy





# Thanks!

Francesco Niglia fniglia@koyslab.eu





