

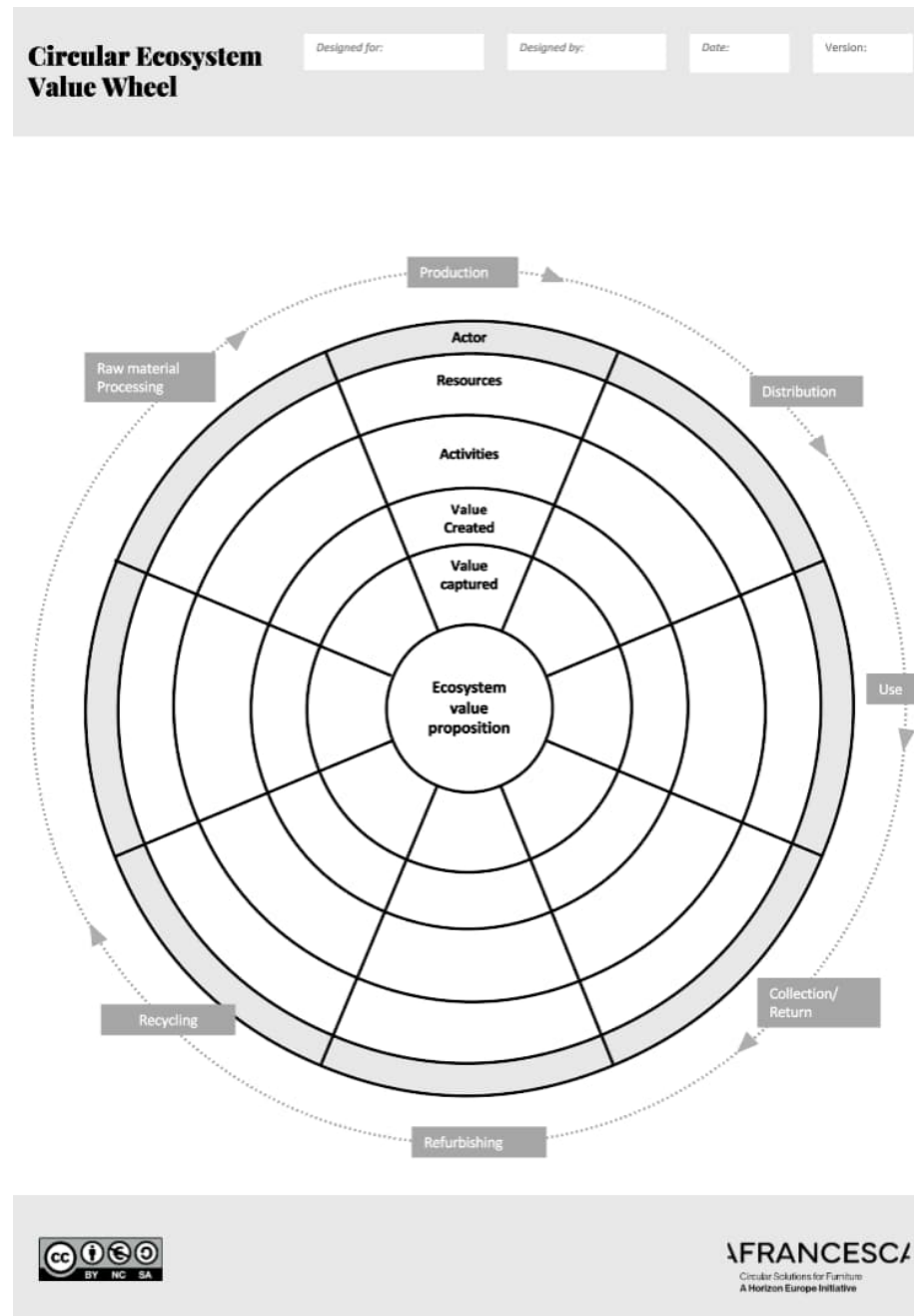


Tool 4.4 Circular Ecosystem Value Wheel



Tool 4.4 – Circular Ecosystem Value Wheel

Phase 4 – Circular Value Proposition Design



Objective of the Tool

The Circular Ecosystem Value Wheel helps organisations analyse how value is created, circulated, and captured across the broader ecosystem supporting a circular business model. The tool enables companies to map the actors involved in different lifecycle stages, identify their activities and resources, and understand how value flows between them. It supports organisations in designing circular solutions that rely on coordinated ecosystem collaboration rather than isolated firm-level initiatives.

What the Tool Is

The Circular Ecosystem Value Wheel is an ecosystem mapping tool used to visualise how value is generated and circulated across multiple actors involved in circular product lifecycles. It structures ecosystem analysis around lifecycle stages such as raw material sourcing, production, distribution, use, collection, refurbishment, and recycling. It helps organisations identify which actors participate in these stages, what resources and activities they contribute, and how value is created and captured through collaboration.

When to Use the Tool

The Circular Ecosystem Value Wheel is particularly useful when organisations are designing or scaling circular business models that depend on ecosystem coordination. It can be used when companies are:

- Mapping ecosystem actors involved in circular value creation
- Designing reverse logistics or recovery systems
- Building partnerships for refurbishment, reuse, or recycling
- Understanding value distribution across the circular ecosystem
- Preparing collaborative pilots or ecosystem experiments
- Identifying gaps or bottlenecks in circular value chains

How to Use the Tool

Step 1 – Start with the ecosystem value proposition: What is the value proposition that is binding all the actors of the ecosystem?

Step 2 – Identify Ecosystem Actors: Map the actors participating in each lifecycle stage, including suppliers, manufacturers, logistics providers, repair partners, recyclers, and digital infrastructure providers.

Step 3 – Identify Activities: Define the key activities each actor performs within the lifecycle stage.

Step 4 – Identify Resources: Identify the resources required by each actor to perform these activities.

Step 5 – Analyse Value Creation: Examine how value is created by each identified actor to support the ecosystem.

Step 6 – Analyse Value Capture: Identify how each actor captures economic, environmental, or strategic value.

Step 7 – Identify Ecosystem Gaps: Analyse missing actors, weak connections, or coordination challenges.

Expected Output

The exercise produces a Circular Ecosystem Value Map describing:

- Lifecycle stages of the circular system
- Ecosystem actors involved in each stage
- Activities performed by ecosystem partners
- Resources enabling circular value creation
- Value created and captured across the ecosystem
- Gaps, dependencies, or coordination challenges

This ecosystem map helps organisations design collaborative structures required to implement circular business models at scale.

Key Dimensions of the Circular Ecosystem Value Wheel

1. Ecosystem Value proposition

This is the central goal that brings all the partners together. It summarizes what this ecosystem aims to achieve for the customers or associated stakeholders. Example may include: Offer a regional platform for alternative materials suitable for furniture production.; set up a take back infrastructure for cluster companies of Murcia.

Guiding question: How can you synthesize in one simple sentence what the ecosystem is trying to achieve?

2. Lifecycle Stages

Defines the key lifecycle phases structuring the circular ecosystem. Typical stages include raw material sourcing, processing, production, distribution, product use, collection or return, refurbishment, and recycling. Circular Ecosystems tend to focus on the whole or specific stages of the product-service life cycle.

Guiding question:

Which lifecycle stages structure the circular system? In which part of the life cycle your business model is most active?

3. Ecosystem Actors

Identifies the actors involved at each lifecycle stage. These may include suppliers, manufacturers, distributors, logistics providers, repair services, refurbishment companies, recyclers, and digital platform providers.

Guiding question:

Which key actors participate in each lifecycle stage?

4. Activities

Defines the key activities performed by ecosystem actors to enable circular flows. Examples include manufacturing, logistics, repair, refurbishment, condition assessment, recycling, and digital tracking.

Guiding question:

What activities are performed by each actor?

5. Resources

Identifies the resources required to perform ecosystem activities. These may include materials, infrastructure, specialised skills, data systems, logistics networks, or digital product passports.

Guiding question:

Which actor's resources enable ecosystem activities?

6. Value Created

Examines how value is generated by actors through ecosystem collaboration. This may include environmental benefits, economic gains from extended product lifetimes, or improved customer value.

Guiding question:

How is value created by individual actors for the ecosystem?

7. Value Captured

Identifies how different actors capture value within the ecosystem. Value capture may occur through revenue streams, cost savings, resource recovery, or strategic positioning.

Guiding question:

How does each actor capture value from circular collaboration?



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