Benchmark Circular Products Logistics

Projekt Overview

The EU depends on China and Russia for **75%** of rare earths while **32%** of imported minerals come from South America[1,2].

To meet exploding demands in the next 15 years, mines must produce more than **60%** of all copper ever extracted to date.[3]

In 2024 global supply chain disruptions saw an annual increase of **40%**[4].

Benchmarking „Circular Products Logistics“ - Overview

Objectives:

- Europe's first cross-industry survey on Circular Readiness & Performance in Circular Supply Chains

- Evaluation along 3 categories:

  ***Enabler**:*
  Strategic & Organizational Requirements
  ***Outcome**:*
  Implementation & Impact of Circular Logistics
  ***Performance**:*
  KPI-based metrics & results

Target groups:

- 1. Manufacturing companies
- 2. Logistics providers, CEP, take-back services
- 3. Retail, ReCommerce, Distributors, Platforms

Benchmark-Design:

- Based on international norms & standards (e.g. B. ISO 59020, ESRS E5, ISO 14083)
- Comparison with anonymized peer group & best in the industry

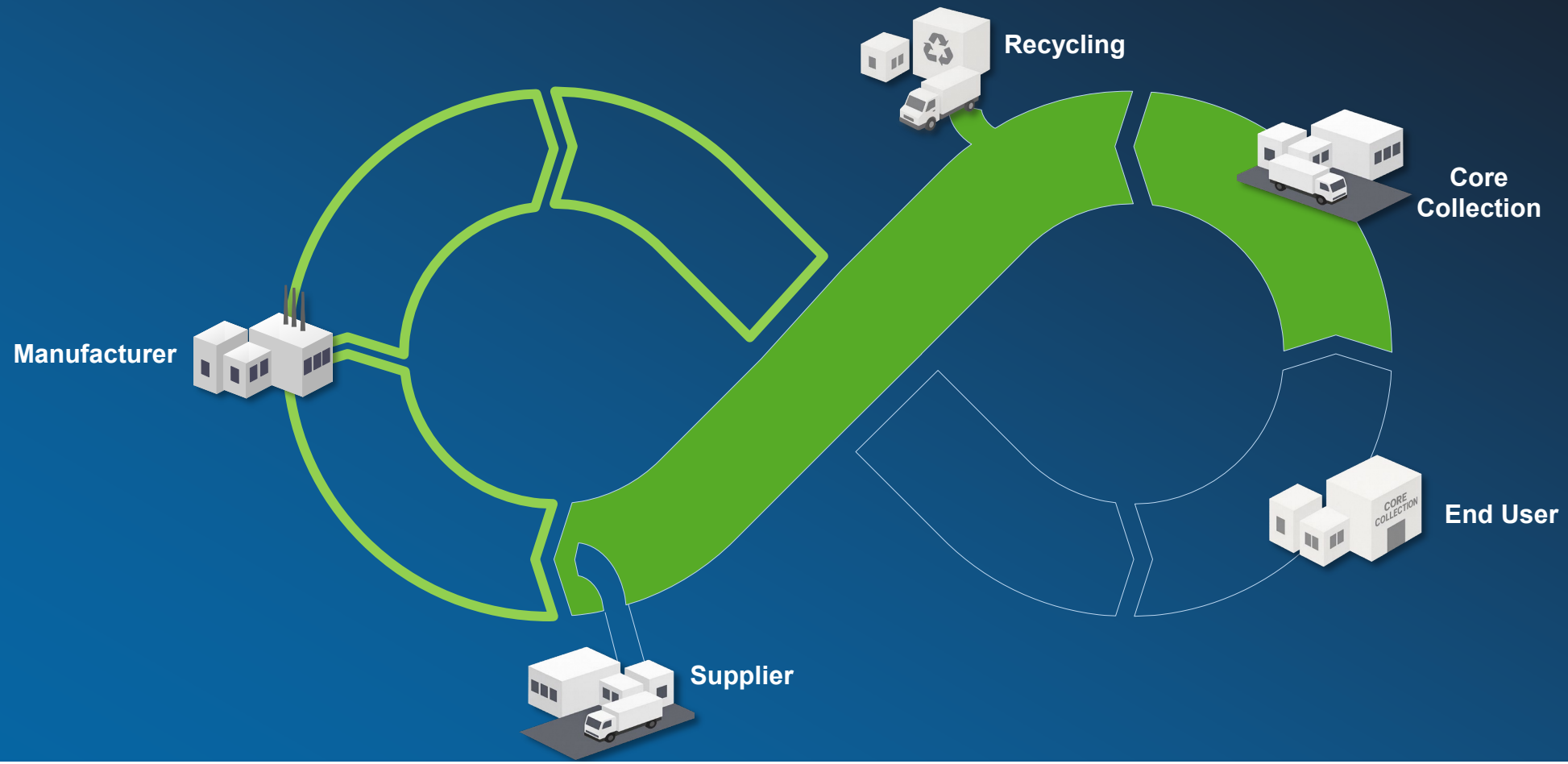
Added value for participants:

- Assessment of current situation and maturity profile
- Best-practice insights & recommendations for action
- Invitation to Roundtables & Company Visits
- Compliant with EU taxonomy and CSRD reporting

Implementation:

- Location: Cluster Logistik, RWTH Aachen and Digital
- Management: FIR e. V. an der RWTH Aachen
- Project start: October 2026
- Project fees: 10.000 €
- Contact: gerhard.gudergan@fir.rwth-aachen.de

For the production economy, transforming from linear to Circular Value Creation Systems can reduce dependency on global supply and push the boundaries of supply chain resilience

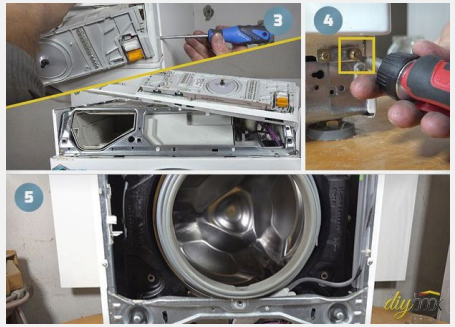


Reverse services market volume predicted to exceed 2 trillion USD by 2035 with CAGR of 9%.[5,6,7]

5) Grand View Research (2025); 6) GMInsights (2025); 7) P&S Market Research (2025)

Benchmarking „Circular Products Logistics“: Potential Target Industries

White Goods / Major Appliances



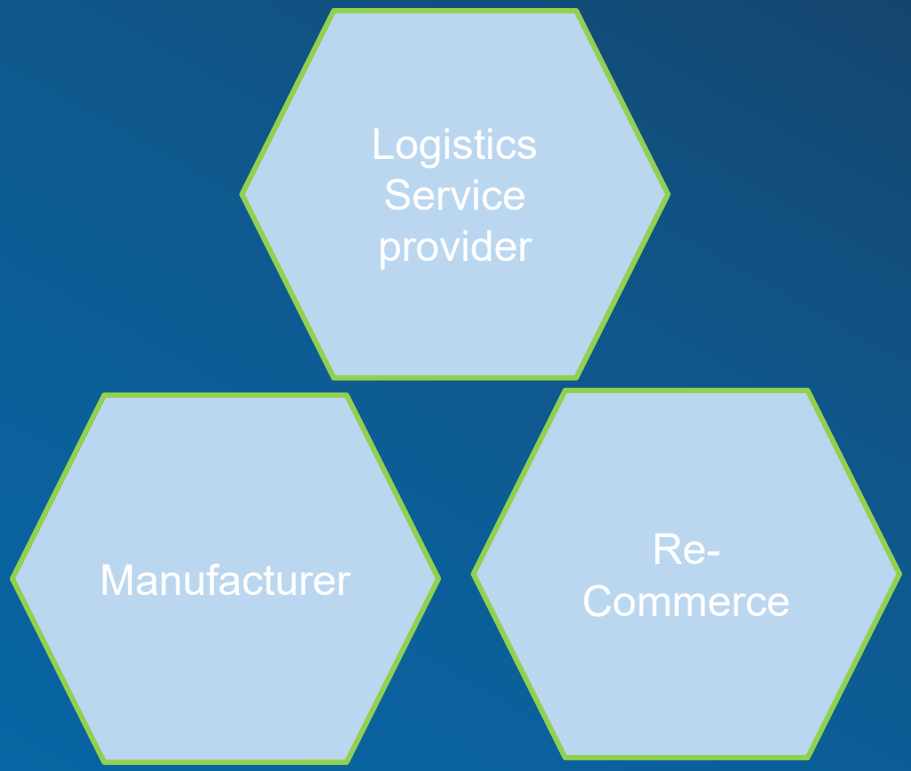
Building Technologies (HVAC, Logistics, Light, …)

Vehicles and Suppliers

Electronics and Medical Equipment

Quellen: 1. Miele, 2. Bosch, 3. BMW, 4. HP, 5. Philips

Project framework – Cicular Products Logistics requires ecosystem perspective



- Why collaboration in the Circular Products Logistics ecosystem is essential
  - The challenges are systemic: limited transparency on product and material flows, complex take-back processes, and economic pressure on second-life models.
  - No single actor can solve them alone: Manufacturers shape products and business models, logistics service providers manage take-back and refurbishment logistics, retail and ReCommerce connect products with customers and markets.
  - Value creation only emerges through collaboration: Only coordinated action across all three groups enables scalable reuse and upgrade models.
  - The benchmarking makes these interdependencies visible: It systematically analyzes interfaces and success factors between industry, logistics, and ReCommerce.

- Unique selling point of the project: Circular Products Logistics is assessed as an integrated ecosystem – not as isolated activities of individual actors.

Your benefits from this partnership?

Your Invest	Content and Networking	Your Results & Benefits
12 Days 10.000 €	• Structured benchmarking framework aligned with global standards • Identify effective circular levers with industry peers • Three coordinated studies across supply chain ecosystem • Co-develop circular models through cross-industry dialogue • Benchmark maturity and define strategic growth priorities	• Assess maturity against peers and best practices • Identify effective circular logistics approaches clearly • Prioritize high-impact investments with measurable outcomes • Ensure regulatory alignment with key standards • Access reference models for circular operations • Strengthen strategy, roadmap, and investment decisions

Join The Consortium – Major Outcomes

- Leverage the enormous potential of circular product logistics to transform industrial value chains, reduce dependency on global supply chains, and unlock new growth opportunities by understanding how value-retaining circular strategies can be implemented across production, logistics, and distribution.

- Learn which circular business models and value-retention strategies exist and how they apply to producing companies, logistics service providers, and retail & ReCommerce organizations.
- Understand how circular supply chains, reverse logistics, and distribution networks must be designed and orchestrated to enable reuse, upgrading, refurbishment, and remanufacturing at scale.
- Gain a holistic view on how production, logistics, and trade are interlinked in circular product ecosystems – and why isolated optimization approaches fall short.
- Receive in-depth benchmarks and insights on strategic enablers, operational implementations, and performance KPIs based on international standards such as ISO 59020 and EN 4555x.
- Be part of an expert group and contribute to the development of a reference framework for value-retaining circular product logistics in Europe.
- Benefit from a strong network of industry partners and experts to accelerate your individual circular logistics strategy – from compliance and resilience to growth and competitive differentiation.

Projekt Timeline – Circular Products Logistics Benchmark

Gather consortium | Gain data and Insights | Explore for future directions | Exploit

Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 | Month 7 | Month 8 | Month 9 | Month 10

2026 / 2027

0. Consortium Development & Kick-Off

Objectives
- Refinement of project objectives
- Further sharpening of the project concept
- Acquisition, and contractual onboarding of consortium partners

Approach
- Systematic desk research
- Structured partner outreach and acquisition

Results
a. Established consortium
b. Finalized project concept including project and timeline plan
c. Kick-off conference

Kick-Off

1. Data Gathering

Objectives
- Study with min. 30 participants (min 10 per category: circular supply chain, logistics, trade and re-commerce)
- 600 data-points for enablers, implementation and performance

Approach
- Web-based survey
- Interviews with firm representatives

Results
a. First European survey on circular products logistics strategy and performance
b. Descriptive results of survey data

Survey results

2. Data Structuring and Analysis

- **Objectives**
  - Identify correlation and patterns
  - Deriving of success metrics and levers
  - Identification of best practices
- **Approach**
  - Data analyses
  - Interpretation of dependencies and patterns
  - Reflection within consortium and on individual bases
- **Results**
  a. Success patterns and levers
  b. Business insights

Success factors

3. Exploration & Development of Insights

- **Objectives**
  - Development of hypotheses based on results 2a) and 2b)
  - Exploration of strategic directions and business model opportunities
- **Approach**
  - Expert interviews
  - Delphi rounds in consortium
- **Results**
  a. Strategic insights both on individual and consortium level
  b. Business patterns
  c. Opportunities in circular products logistics markets

Business insights

4. Road Mapping & Exploitation

- **Objectives**
  - Priorities and roadmap for business and ecosystem development in the circular product logistics market
- **Approach**
  - Road mapping and ecosystem design as methodologies
  - Workshops
- **Results**
  a. Reference roadmap for circular product logistics businesses
  b. Joint whitepaper by the consortium

Closing conference
- Summary of the results
- Outlook

Roadmap

Transform, don’t wait

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