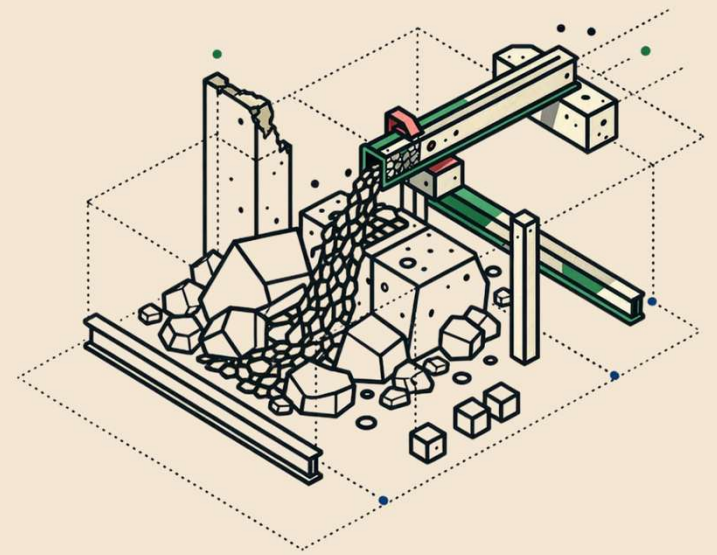


From Construction and Demolition Waste to High-Value Circular Lightweight Construction Solutions

Building a new circular value chain for selected secondary materials



The Opportunity Is Too Large to Ignore

38.4%

EU Waste from C&D

Europe's single largest waste stream in 2022

12.2%

Material Circularity Rate

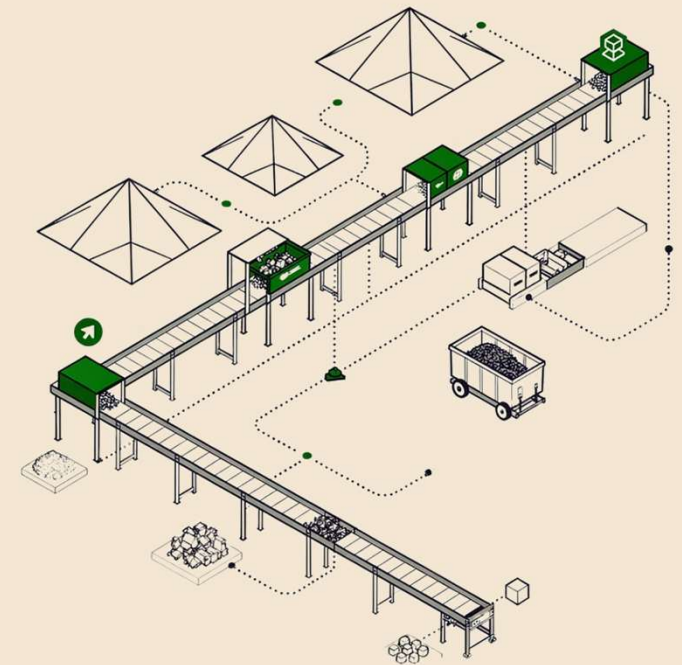
Nearly 9 in 10 materials still follow a linear path

9 in 10

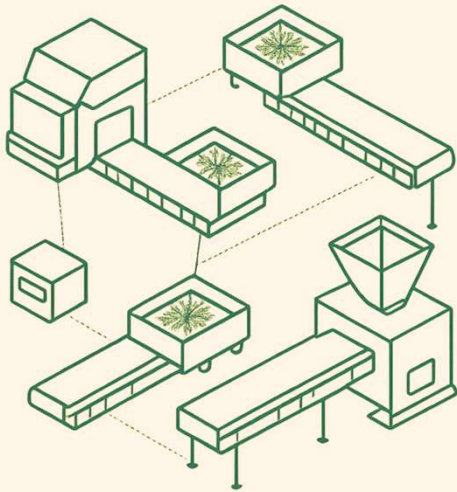
Materials Still Linear

Vast secondary mineral and polymer volumes remain underused or downcycled

The circular economy transition in construction is a **strategic industrial opportunity** — not just an environmental obligation.



The Market Gap: Recycling Exists — Market-Ready Solutions Don't



Strong recycling capacity

Europe leads in recycled aggregates, selective demolition, traceability and polymer recycling.

Siloed waste streams

Mineral and polymer streams are managed separately — rarely combined into higher-value products.

Persistent market gap

Reliable, non-structural lightweight construction solutions using combined secondary streams remain largely absent from the market.

From Waste Management to Product Value



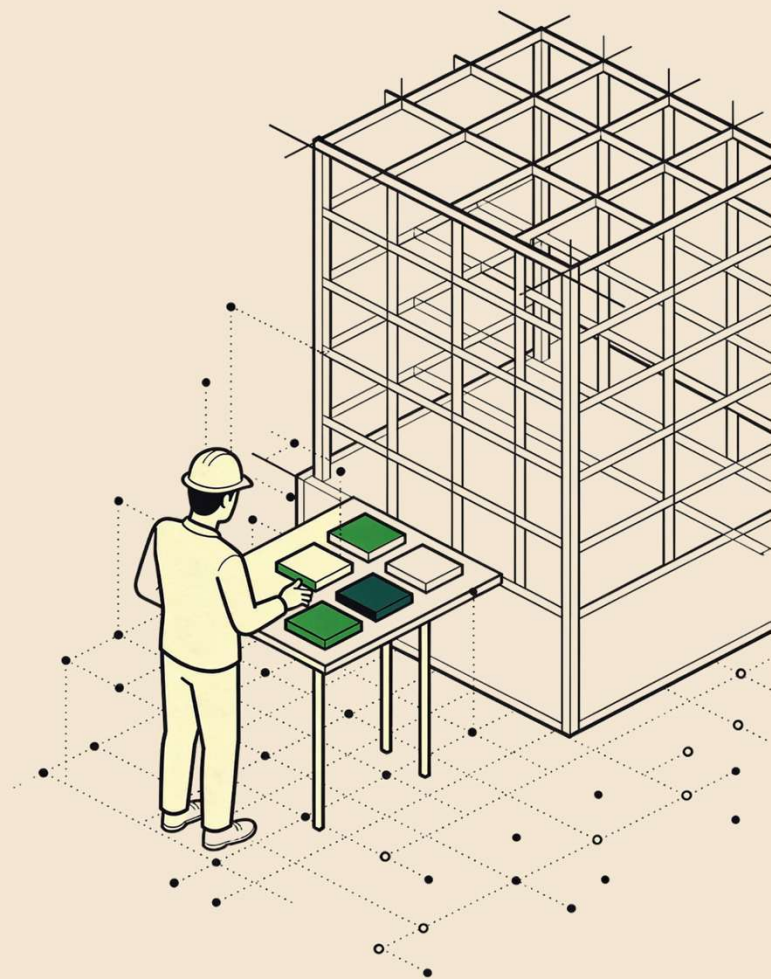
Waste Streams

Secondary Materials

Solutions

Pilot Applications

Each step transforms lower-value inputs into progressively higher-value outcomes — closing the loop between demolition and construction.



The Project Vision

Circular Solutions

Develop and validate lightweight, non-structural circular construction solutions using CDW-based secondary mineral materials and selected recycled polymer streams.

Target Applications

Renovation, lightweight filling, non-structural building elements, lightweight construction systems and other non-load-bearing uses.

Full-Cycle Approach

From material characterisation and quality control through to pilot validation and market documentation.

Interregional Collaboration

Combining complementary expertise, material access and industrial capacity across European partners.

Why This Matters

→ Resource independence

Lower dependence on virgin raw materials through reliable secondary material use.

→ Regional value creation

Higher value from local and regional waste streams that currently have limited outlets.

→ Environmental impact

Measurable reduction in embodied carbon and material waste across the value chain.

→ Industrial opportunity

New products, new customers and new circular value chains for participating companies.



What the Core Team Already Brings



Material Expertise

Characterisation and quality control of secondary raw materials across diverse stream types.



Product Development

Development and evaluation of lightweight, non-structural circular materials ready for industrial application.



Performance Validation

Technical performance and durability testing under real use conditions.



Sustainability Assessment

Life Cycle Assessment (LCA) and Life Cycle Costing (LCC) to substantiate environmental and commercial claims.



Market Readiness

Technical documentation, quality assurance and traceability requirements for secondary materials.

Partners We Are Looking For

CDW Recyclers & Demolition Operators

Access to mineral fractions, fines or recycled aggregates.



Polymer Recyclers & Processors

Handling selected secondary polymer streams.

Construction-Material Producers

Pilot-scale or industrial production capacity.



Construction & Renovation Companies

Testing and adopting circular solutions in real projects.

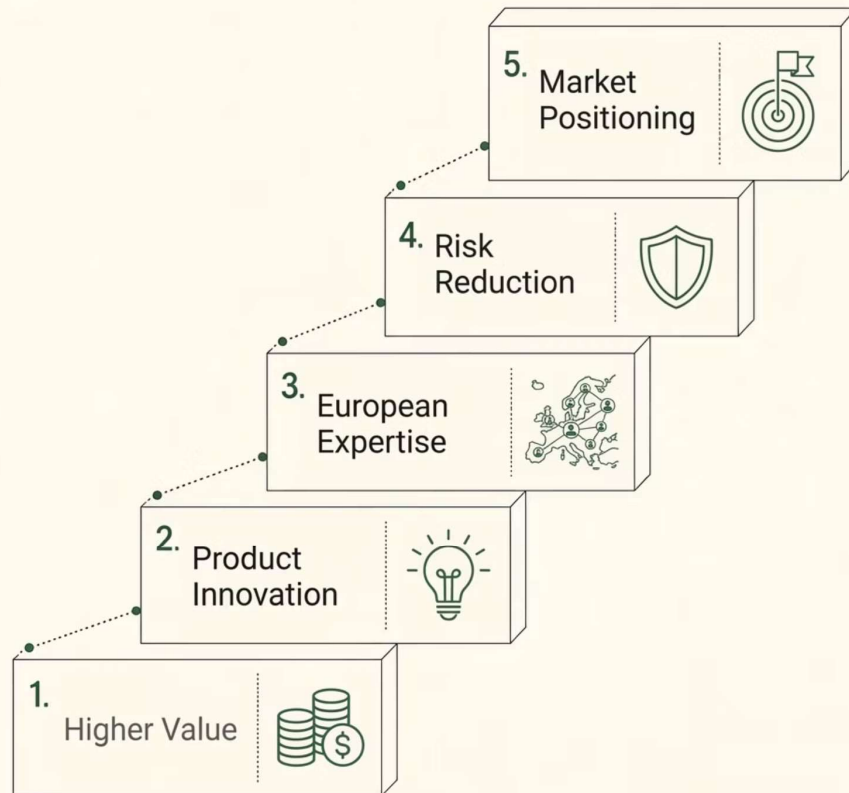
Municipalities & Public Authorities

Demonstration sites or procurement pathways for circular solutions.



Market-Access Partners & Clusters

Connecting solutions to first buyers and relevant value chains.



Why Participate

1 Create higher value

Turn material streams with limited use or low market price into competitive circular products.

2 Access European expertise

Complementary scientific, technical and industrial know-how across partner regions — no single actor needs to do it alone.

3 Reduce commercial risk

Test solutions with real material streams and real use conditions before scaling investment.

4 Build market position early

Gain first-mover advantage in the fast-growing circular construction sector.

Join the Partnership

"Let's turn waste into reliable solutions, solutions into pilot applications, and pilot applications into real market opportunities."

Join the collaboration

A focused interregional partnership for circular construction innovation — with a clear path from materials to market.

Contribute what you bring

Materials, production capacity or market access — and gain access to a scalable, replicable circular value chain.

The window is open now

This is the moment to shape the collaboration — partner roles are being defined and early partners have the strongest influence.

