

New European Bauhaus Academy

Week 1: Principles of Circular
Design for Interiors
Volupte Studio



**Circular
Bio-based
Europe**

Joint Undertaking

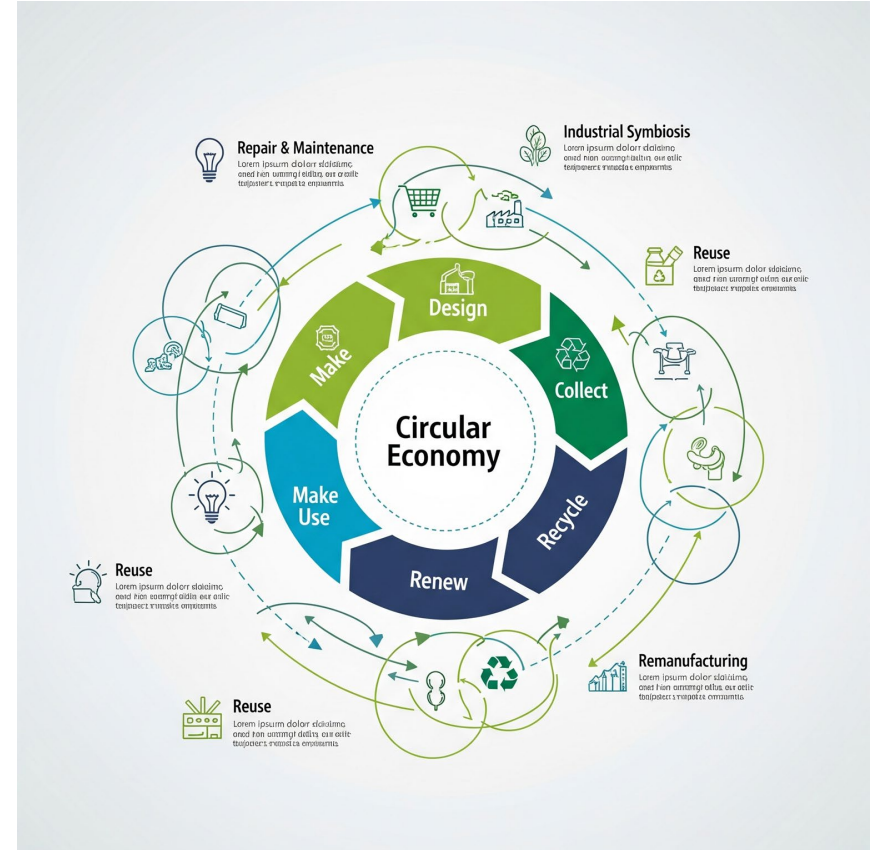
 Bio-based Industries
Consortium



Co-funded by
the European Union

What is Circular Design?

- A regenerative approach to design
- Focuses on reuse, recovery, and reduction of materials
- Moves away from the traditional “take-make-dispose” model



Core Principles of Circular Design

- Design for durability
- Design for reuse & repair
- Keep materials in use
- Use safe & non-toxic inputs
- Regenerate natural systems
- Icons/visuals for each principle

Linear vs Circular Systems

Linear = resource extraction → production → waste

Circular = resource reuse → production → recovery

Environmental impact comparison

The Environmental Cost of Traditional Plaster

High energy use in gypsum production

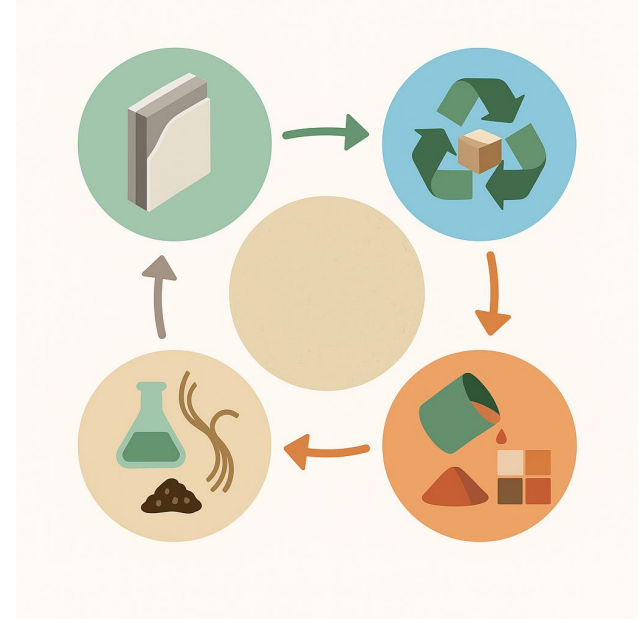
Landfill impact of offcuts and waste

Non-renewable extraction practices

Limited reuse or recyclability of standard materials

Why Recycled Plaster?

- Diverts material from waste stream
- Reduces CO2 emissions from production
- Cheaper and locally available
- Compatible with natural binders and finishes



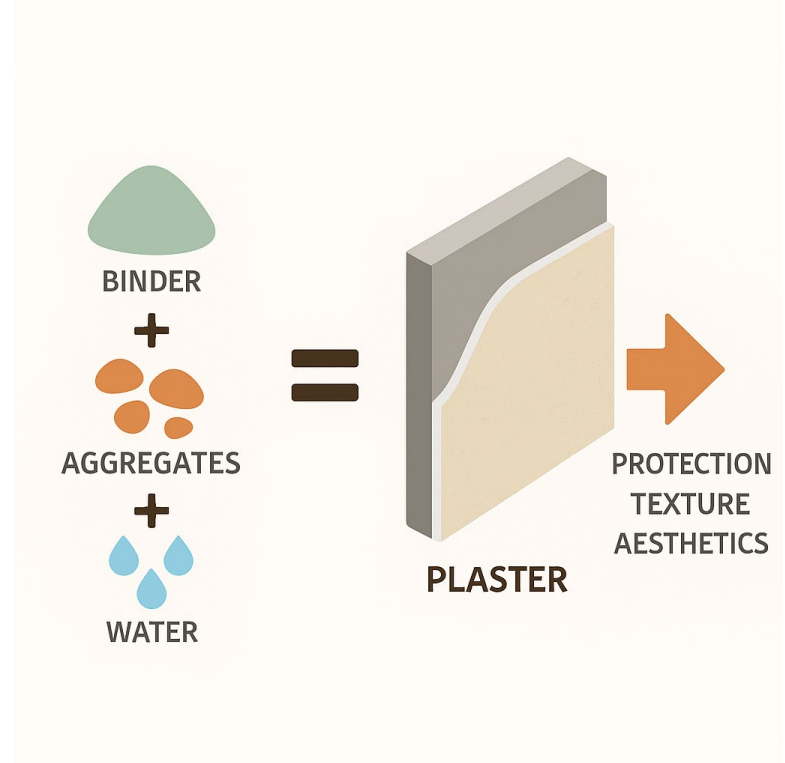
Circular Wall Finishes in Practice

Reuse of materials onsite

Compostable additives (e.g. fibers, casein)

Designing finishes for easy repair

Non-toxic pigments and finishes



Tools to Support Circular Design

Ellen MacArthur Foundation's Circular Design Guide

Cradle to Cradle® certification overview

Material passports

Lifecycle Assessment (LCA) tools

Your Role as a Designer or Builder

Choose materials for longevity and reuse

Ask questions about sourcing and waste

Consider end-of-life in design decisions

Collaborate with local suppliers

Recap & What's Next

Circular design is about regeneration, not just sustainability

Recycled plaster is a key low-carbon material

Next session: “Understanding Plaster Basics”

Download: Illustrated Overview, Glossary, Quiz



New European Bauhaus Academy



**Circular
Bio-based
Europe**

Joint Undertaking



Bio-based Industries
Consortium



Co-funded by
the European Union

The project is supported by the Circular Bio-based Europe Joint Undertaking and its members.

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CBE JU. Neither the European Union nor the CBE JU can be held responsible for them.