



# PoC Validation and Commercial Scaling

**TECHNICAL ADVICE TO CONVERT PROTOTYPES WITH RECYCLED MATERIALS INTO SCALABLE PRODUCTS**

## KEY WORDS

PROOF OF CONCEPT (POC),

COMMERCIAL SCALING,

RECYCLED MATERIALS

## DESCRIPTION

The Laboratory for Exploration in Environmental Architectural Materials (LEMAA) offers consulting services for proof-of-concept (PoC) validation and commercial scaling of products made with recycled materials. This service aims to reduce technical uncertainty and accelerate time to market, particularly in architecture, construction, and design. LEMAA integrates performance requirements review, process feasibility analysis, definition of validation metrics, identification of risks and gaps, and the structuring of a scaling roadmap that connects prototypes, piloting, and production, supporting design, materials, and manufacturing decisions.

## AVAILABLE TECHNIQUES AND/OR EQUIPMENT

Definition of Proof of Concept (PoC) criteria and performance metrics (functional and usability); Technical feasibility and manufacturability (DFM) assessment for recycled materials; Identification of technical risks (material, process, and performance variability) and mitigations; Design of a validation plan (prototypes, tests, pilots, and technical evidence); Roadmap for piloting, scaling, and transfer (costs, capacities, and requirements)

## APPLICATIONS

- Proof of Concept (PoC) validation for products with recycled materials before investment in production
- Preparation of solutions for industrial piloting and process scaling
- Support for companies and entrepreneurs in market entry and technical decision-making
- Design and materials optimization for consistency, quality, and performance
- Support for applying for funding and gathering evidence for TRL/MVP

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