

STAKEHOLDER SURVEY RESULTS

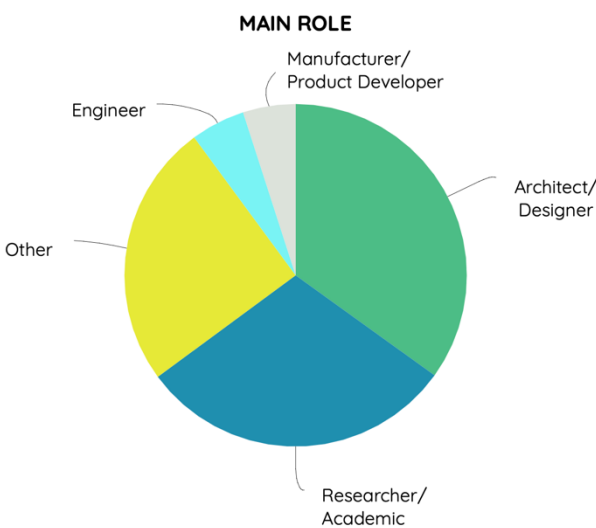
Introduction

The CIRCBUILT project has established a Stakeholder Forum, a collaborative platform that brings together actors from across the construction industry to provide early, practice-based input that guides the project’s research activities. By engaging stakeholders early in the process, the project ensures that the research, prototyping and testing of circular building products are aligned with real-world needs, technical requirements, market expectations and relevant policy frameworks. An initial stakeholder survey was conducted in November 2025 to gather insights on current practices, perceptions, and enabling conditions for the use of circular and waste-derived materials in the construction sector. The survey targeted stakeholders across the construction value chain, including material producers, designers, researchers and end-users.

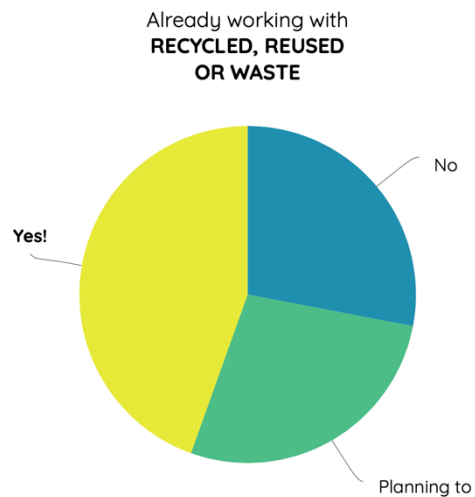
The primary goal of the survey is to collect evidence that would directly inform and guide the project’s development using a participatory design approach.

Stakeholder Overview

A total of 20 stakeholders completed the survey. Participants represented a balanced mix of construction sector end-users, circular building product manufacturers, research and academic institutions and policy and standardisation bodies. Participants are based in Austria, Finland, France, Germany, Poland, Portugal, Switzerland and United Kingdom, reflecting a cross-European perspective consistent with the project’s scope. Professional roles included architects and designers, engineers, researchers, manufacturers and product developers, sustainability consultants, innovation managers, and public-sector professionals.



Q2/ What’s your main role in your organization?
(Other: Sustainability consultant and developer, innovation manager, project specialist)



Q4/ Are you already working with materials that began as something else – recycled, reused or waste-derived sources?

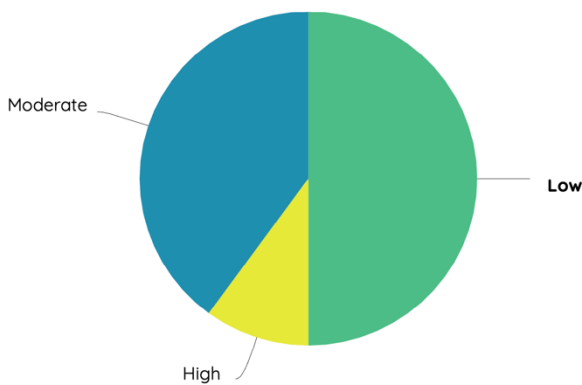
Current Engagement with Circular Materials

Most stakeholders are already exploring, or planning to explore, circular materials in construction, reflecting a growing interest in sustainable and regenerative approaches. Engagement spans a wide spectrum, from experimental research with bio-based materials such as straw bales, mycelium, and innovative bioplastics, to practical reuse of existing building components like stones, tiles, and sanitary

fixtures. Recycled and waste-derived materials are also being integrated, including aluminum, modified bitumen, glass-fiber composites, and components repurposed from end-of-life (EoL) products, such as wind turbine blades used in modular construction. These efforts occur across diverse contexts, from renovation and adaptive reuse projects to new construction and academic research, illustrating both creativity and pragmatism in material selection.

standardisation, which facilitates reliable implementation.

CIRCULAR DEMAND
in your sector



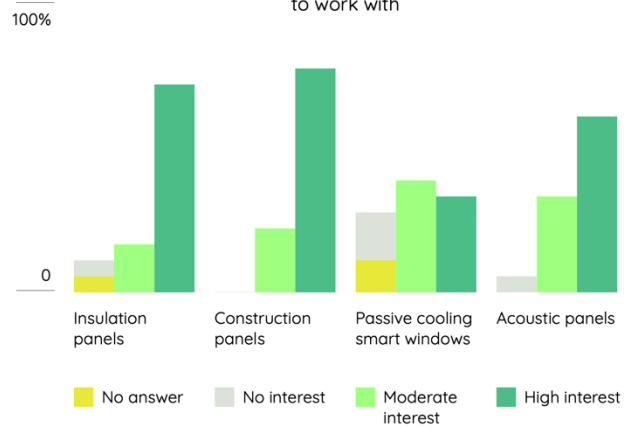
Q19/ How would you describe current demand for circular building products in your sector?

Overall, experience with circular materials remains largely at an early to intermediate stage, with stakeholders reporting generally positive outcomes. While long-term or large-scale deployment is still limited, these practices indicate an increasing familiarity with circular approaches and a willingness to experiment, laying the groundwork for broader adoption in the future.

Readiness and Interest in Circular Building Products

From a design and construction perspective, stakeholders are most prepared to integrate circular solutions in familiar product categories such as thermal insulation panels, construction panels and indoor acoustic panels. These materials represent relatively low-risk opportunities for circular adoption due to their practical applications on-site, frequent use across projects, and the potential for

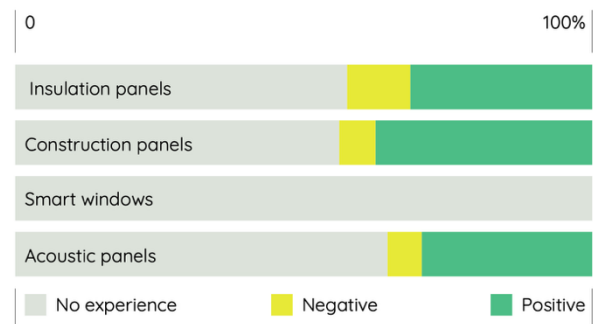
READINESS
to work with



Q5/ For each category below, how ready would you be to work with materials from raw or waste origins?

Interest in more innovative solutions, such as adaptive passive cooling smart windows, is moderate. Stakeholders have no prior experience with these systems, and as such solutions are not yet commonly applied in practice, many may have limited understanding of their operation and potential performance benefits.

EXPERIENCE
so far



Q6/ And how would you describe your experience so far?

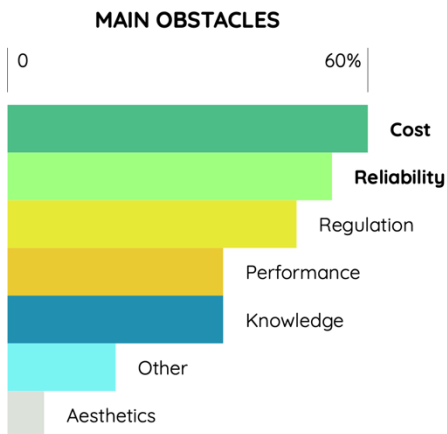
Perceived Benefits of Circular Materials

Stakeholders widely acknowledged the environmental benefits associated with circular materials, particularly in terms of reduced environmental impacts and contributions to circular economy goals. Additional benefits identified include strengthened local supply chains, increased innovation potential and enhanced competitive positioning. Improved

public and client perception was also noted, alongside the added value of cross-sector collaboration, especially between construction, industrial, and resource-based sectors.

Barriers and Cost Considerations

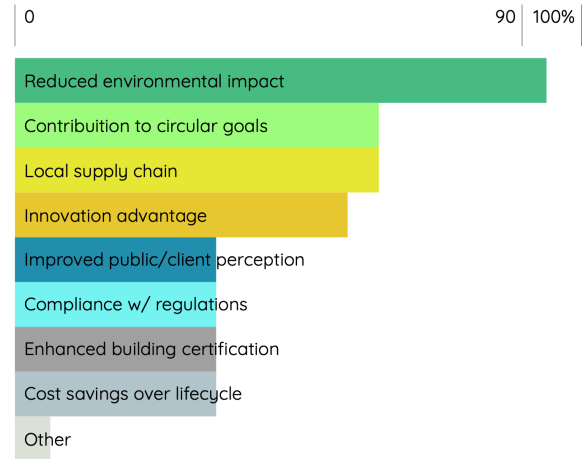
Despite the recognised benefits, several barriers continue to constrain wider adoption. Cost competitiveness remains a primary concern, alongside uncertainties regarding long-term performance and reliability. Current regulations and many certification standards do not actively promote the use of circular materials, nor do impose greenhouse gas emission limits on material selection, meaning there is not yet a formal requirement for these materials to be used. Resistance to change among clients and other decision-makers, according to some stakeholders, adds an additional layer of difficulty addressing these challenges.



Q9/ What makes it hardest for your organization to take the next step toward circular use of materials?

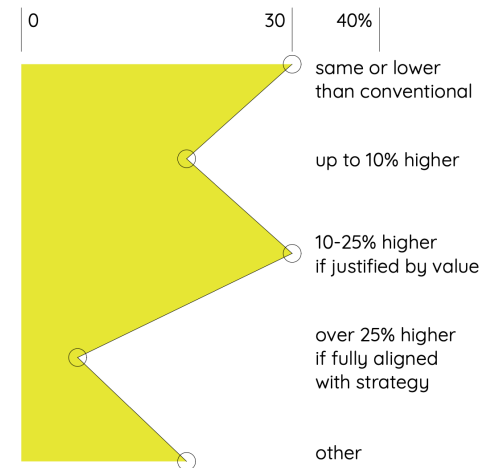
In terms of cost expectations, respondents indicated that circular materials are most likely to become a default choice when priced at or close to conventional alternatives. However, a moderate additional cost of up to 10–25% was considered acceptable when justified by demonstrable lifecycle value, improved performance, environmental benefits, or alignment with certification benefits and sustainability strategies.

NOTICED BENEFITS



Q8/ When materials circulate instead of being discarded, what benefits do you notice?

COST of circular materials

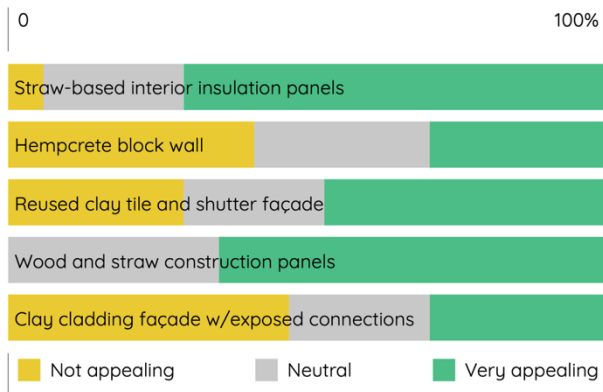


Q12/ At what cost would circular materials become a natural choice for your organization?

Aesthetics and Market Acceptance

Aesthetic considerations were identified as an important factor influencing market acceptance of circular building products. A hybrid aesthetic approach, combining visible circular features with conventional design solutions, was most frequently perceived as supportive of wider uptake. At the same time, respondents emphasised that aesthetic strategies should remain context-specific, depending on building typology, user expectations, and local cultural and market conditions.

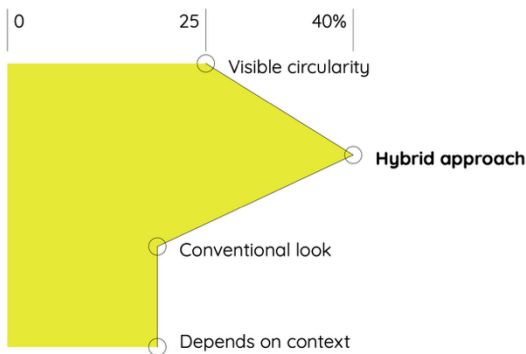
circular images
VISUAL APPEALING



Q10/ How visually appealing do you find the following photos?

The visual evaluation of circular material examples suggests that such products are not inherently perceived as unattractive, if design quality and craftsmanship are maintained.

AESTHETIC DIRECTION



Q11/ When it comes to circular products, which aesthetic direction do you think would most help market acceptance?

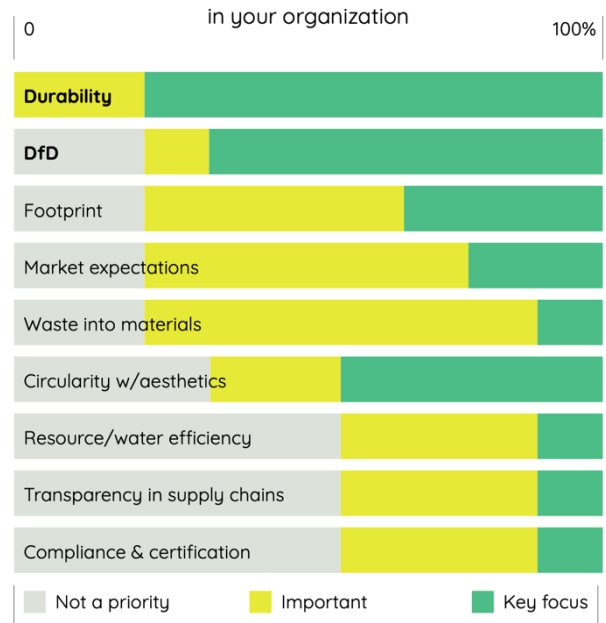
Implications and Next Steps

Overall, the survey confirms strong interest in circular building materials across stakeholder groups, combined with a pragmatic assessment of the current context, including regulatory frameworks, material availability and economic constraints. While the environmental justification for circularity is well established, the findings highlight the need for robust performance data, life cycle and handprint assessments and clearer certification and regulatory guidance and certification to enable scaling beyond pilot and niche applications.

Given the limited sample size of this initial survey, the results should be interpreted as indicative rather than comprehensive; nonetheless, they offer valuable early insights and highlight areas where deeper investigation and further stakeholder engagement will be essential.

Survey findings will be integrated into future project deliverables, stakeholder engagement activities, and policy-oriented outputs, ensuring that stakeholder evidence continues to inform the development, validation, and deployment of circular building products.

CIRCULARITY PRIORITIES



Q21/ How central is circularity to your organization's plans for the next 3-5 years?

Acknowledgements

The project consortium would like to thank all stakeholders who contributed to this survey. Their input provides essential evidence to support the project objectives and will play a key role in shaping the next phases of project implementation.

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