Challenges in reducing waste generation from construction

The construction industry is moving towards a circular model to reduce raw material use and waste generation



Catalysts to overcome the current waste reduction challenges in the UK



- Adopt a systematic approach across all life cycle stages
- \checkmark Have early waste planning and reuse strategies
- On-site waste segregation for recycling
- Eliminate waste disposal or landfilling



Principal sustainability consultants 20%





Increased emphasis on CW reduction from early design stages, increased use of digital tools, granular and clear CW data, and seamless communication and collaboration would support the built environment to shift from recycling to prevention and source reduction

Maximising the Construction Waste Reduction Potential – Barriers and Catalysts

Proceedings of the Institution of Civil Engineers - Civil Engineering Sivashanmugam *et al.* (2023) DOI: 10.1680/jcien.22.00163

Expert stakeholders interviewed online



Key challenges faced by stakeholders in reducing waste generation

Inadequate incorporation of waste reduction strategies from the early design stages of the project life cycle



Lack of digital innovation, data management, and communication among stakeholders

Lack of granularity in construction waste (CW) information within the context of life cycle assessments



- Limited communication and collaboration among the supply-chain members
- Lack of defined CW objectives



