

## The Built Environment Special Interest Group

### Circular Economy in the Built Environment

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#### Panel

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#### Challenges

- Vacancy and dereliction is often a cultural issue. The technical knowledge to re-use buildings exists but there is a need to reframe dereliction and re-use as a solution to create new homes.
- Now is the time to implement change and operationalise the circular economy concept. Need to avoid 'greenwashing' and truly understand the implementation of circular economy strategies.
- Shortage of expertise and skills throughout the supply chain makes implementation difficult.

#### Discussion Points

- We should manage and maintain our existing assets to extend their useful life. This will drive down the use of materials.
- The re-use of existing buildings reduces the amount of materials required. If practitioners truly want to be sustainable, they should be refurbishing buildings rather than building new.
- The re-use concept is not new. Cultural heritage is often a driver, however, there are also examples of a lack of materials being the driver e.g. Warsaw reconstruction plan following WWII.
- New build vs retention is often a financial decision. In some cases, new builds are considered more attractive to big brand names and there is more certainty on how to cost. The knowledge of how to cost a refurbishment is lacking.
- [‘This is Derelict Ireland’](#) report highlights the high level of dereliction in Cork, Ireland, combined with a housing crisis. This is not unique to Cork. The report debunks the myths associated with dereliction. Opportunities exist to reuse derelict buildings and revitalise areas. Policy can help to incentivise. One example being compulsory sales.
- Architects and engineers are thinking about modular design. They also need to think about modular deconstruction, re-integrating materials and keeping them in the system for as long as possible.
- Organisations need to have a circular economy strategy in place. The question then is how to embed that into day to day thinking, certifications and contractual agreements. Clients and their consultants need to have conversations about risk.
- Implementing a circular economy requires systems thinking. The built environment and natural systems are interconnected processes/services. This whole system needs to be central to the thinking of the circular economy model/concept.
- Digital tools can be used to help map materials i.e. material passports, and understand connectivity between systems within systems.

#### Opportunities

- Develop a shared understanding across the supply chain of a circular economy in the built environment.
- Utilise the digitalisation of assets. Intelligent assets can enable circularity and connect systems.
- Develop skills and knowledge on material/building re-use including design and costing. This education should form part of the training of professionals.

