PICK EVERARD | Leaving positive and lasting legacies

A workflow for applying circular economy principles in the cultural and museum sector

We recognise that for many of our clients with assets in the cultural and museum sector, there are unique challenges to be solved when delivering solutions that minimise waste and resource consumption, whilst specifying low impact materials.

This workflow has been developed to illustrate how projects in this sector can still realise the benefits of circular economy design whilst operating within boundaries posed by factors such as listed status, multi decadal asset life, and unique curatorial requirements.

"This circular model doesn't just reduce waste; it bridges the gap for institutions with limited budgets, unlocking access to high-quality interpretive resources."

Eric Langham, Vice Chair
Association for Heritage Interpretation

1 Include circular economy objectives in the design brief

Engage delivery partners and key stakeholders at project initiation to identify key circular economy commitments (and possibly targets) for a project. These may be influenced by planning, and/ or related to corporate objectives.

Example commitments (or targets) could include maximising the volume of reused materials/items, or measuring the carbon benefits of circular interventions.

2 Review the existing materials and assets on site

Undertake a resource recovery audit to assess viability of retention, retrofit or reuse of materials on site or with wider networks. Report these findings and discuss viability.

3 Assess proposed design options against the objectives

At RIBA 2, ensure that delivery partners report on circular economy progress against targets as part of the wider sustainability options appraisal process.

4 Track material flows for the proposed design and split based on duration of intended use

Through RIBA 3 and 4, map the proposed material flows associated with the design. Group materials/assets by their intended in-use life to enable identification of targeted circular economy design strategies.

5 Design out waste

Work with delivery partners to identify solutions to reducing waste arising both from construction and operation. Examples could include standardising design or working with the supply chain to identify take back schemes.

6 Assess opportunities for low impact or reused materials

Challenge use of virgin / non renewable materials and assess whether these can be reduced and /or substituted with reusable or low impact materials and exhibition / other items. For instance, the following networks promote sharing of resources specific to the museum and cultural sectors:

- CAN - Circular Arts Network
- MuseoCycle Network
- Freecycle - Museum Freecycle UK Group

7 For long lived assets: Design for durability

For assets such as permanent display galleries seek to maximise the useful life of these. Example approaches include designing for robustness and designing with easy asset maintenance in mind. Engage with operational teams to enable human centred design.

8 For short lived assets: Design for reuse, disassembly and modularisation

For short lived, temporary, assets seek to reduce waste and material consumption by designing for future reuse either of entire assets and components or their constituent materials. For instance, plinths, benches, tables, vitrines, shelves, crates can all be reused, repaired and shared.

Measure your successes and failures and share knowledge!