TOP TIPS FOR EMBEDDING CIRCULAR ECONOMY PRINCIPLES IN THE CONSTRUCTION INDUSTRY
01. Commit to explore the circular economy

Make a commitment to explore circular economy opportunities on your project(s), and to take them forward where viable. To move towards the circular economy, we need clients who are open to the idea and are willing to test different approaches. When exploring circular economy opportunities, be sure to consider the impacts on the overall project. For example, you might need to make changes to the way you procure and manage the building/asset over the long term.
02. Use the procurement process

Find a team that can bring the right mindset and capabilities to innovate in this area. As a client, it’s really important to clearly communicate to your potential supply chain that you want circular economy approaches to be implemented. The procurement process is a powerful mechanism to do this, and it can stimulate innovation around the circular economy. Include circular economy objectives or outcomes you’re seeking in the tender brief, and include at least one tender question on the circular economy.
Encourage innovation and collaboration

The circular economy is a new model for the construction industry, so it requires innovation and collaboration to make it happen. You will need to encourage much more partnership working, be prepared to use new products and systems, procure in different ways (e.g. product as a service), and do things like test new materials. Push your team and don’t settle for mediocrity!
04.

Set clear performance requirements

You can drive innovation by telling your design and procurement team what you want your building/asset to do (a performance specification) rather than being prescriptive about the design, specifications and materials they must use (a technical specification). For instance, the infrastructure sector often sets performance requirements eg “the asset must pump a certain volume of water, with a given energy efficiency and service life”, and the industry innovates in response to this.
Establish a minimum design life

Set a minimum design life for the various layers of a building (structure, façade, services, fit-out) and elements of infrastructure projects (e.g. bridge structure, road surface), and ask your design and construction team to identify appropriate circular economy strategies to suit the design life. For example, long life infrastructure projects should be designed for durability. Shorter life elements like kitchens should be designed to be easily upgraded, reused and recycled.
To support circular economy approaches, it is best practice to make investment decisions based on whole life costs of a material, product, or building/asset. This means considering the initial capital cost, as well as operational, maintenance, repair, upgrade and eventual end of life costs. Assess whether lifecycle costs could be reduced by applying circular economy approaches including leasing, sharing, design for durability and ease of maintenance, design for adaptability, or implementing take-back arrangements etc.
Start a dialogue with the supply chain

The construction industry supply chain has expertise to help you to innovate. Communicate what you want to achieve, and find the people and companies that share your ambition and can help deliver it. Build trust. Share risks and opportunities. Understand that it may take two or three projects before you and your partners perfect new approaches.
Do you need a new building/asset, or can you refurbish or modify an existing one? Retaining the resource value embedded in structures is one of the most significant actions you can take to reduce waste and material consumption. Include a stage in your asset management process to review the need for a brand new building/asset.
If refurbishing or demolishing, commission a comprehensive pre-refurbishment or pre-demolition audit to identify materials and products that can be retained, reused for high value purposes elsewhere, or recycled. You can then use this information to set targets and objectives within the refurbishment or demolition tender documents.
Top Tips for Embedding Circular Economy Principles in the Construction Industry

This resource is intended to help the construction industry start its journey towards the circular economy. It offers a series of practical tips - for Clients, the Design Team, Contractors, Material and Product Manufacturers, and Demolition Contractors. Those who have already developed and are practicing a sophisticated approach to circular economy may find these tips useful as a checklist.

Read more about it on the website: www.cetoptips.com

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