

## COLLABORATION IS KEY FOR THE CONSTRUCTION INDUSTRY TO ACHIEVE CIRCULARITY

The construction industry is a global leader in waste production, generating approximately 100 billion tonnes annually. Of this, an estimated 75% has residual value, but is not reused or recycled. We are ploughing through finite resources at an alarming rate and polluting our planet by simply dumping waste. This is simply unsustainable. Instead, we must minimise new resource consumption and waste production by reintroducing materials into the value chain and extending their lifecycle. It is critical that we act now and transition from a linear to a circular economy to save our planet.

**True circularity is achieved when the entire value chain is considered, and at each stage, actions are taken to feed back into other stages.** An individual firm's activities and product offerings are reliant on a series of previous and onward firms. As a result, we cannot consider ourselves in isolation, but must face the bigger picture we are part of. Rethinking and integrating all elements of your operations can feel an overwhelming task, however, with circularity being an all-encompassing concept, it means there are so many opportunities to make a positive impact.



Currently, many firms have a restricted circularity focus. Their view is narrow, concerned only with the scope of their own activities. Whilst a step in the right direction, this isn't enough. Broadening the view to include their relations with other firms is how truly impactful results are achieved. **No matter at what point an organisation sits along the value chain, right from raw material extraction; to product design and construction; to end-of-life demolition and disposal, there are opportunities to work with and support other stages.**

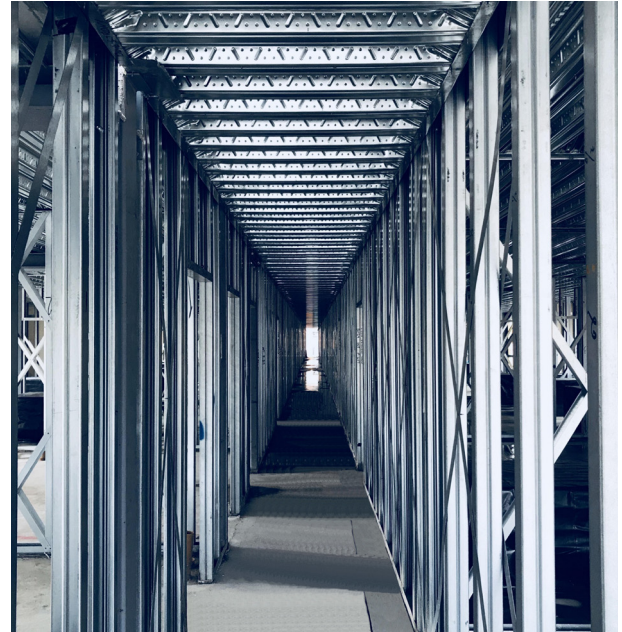
This is how upstream innovation plays a key role. You must identify the root cause of your products' negative environmental impacts and tackle them there. Often, the source is at another stage of the supply chain, and hence you must collaborate to eliminate it.

Breaking away from the traditional "take-make-dispose" mindset is a big change and, as is often the case, change is not a seamless process. Those who have begun to navigate this new circular world have done so in varying ways, resulting in a range of metrics and measures emerging. 'Cradle-to-gate', 'cradle-to-grave', and more recently 'cradle-to-cradle' are all examples of the circularity-related terminology being used. The nuances in their definitions and the extent of the value chain which they consider varies significantly. Consequently, even those making circular efforts are currently not singing from the same hymn sheet.



'Cradle-to-cradle' is the definition of true circularity, encompassing all stages of the value chain and how the traditional 'final' stage of disposal loops back into a previous stage. This is the approach we should all take. At present, the lack of alignment between firms' perspectives on circularity means our impact as an industry is not reaching its potential.

**We must unite to deliver. This is an opportunity for us all to advance our focus to cradle-to-cradle methods and break the stereotype that the construction industry lacks agility and is slow to embrace change.**



**Etex New Ways' new brand, Remagin, demonstrates how construction companies can collaborate and still achieve commercial success in their pursuit of circularity.**

The brand's cradle-to-cradle approach exemplifies a holistic and innovative approach to reducing resource consumption and waste production. It integrates design capabilities, and product technologies and solutions to create complete offsite building systems that provide greater lifecycle sustainability and commercial benefits. Light gauge steel is at the core of its offer – a material that has a high strength to weight ratio, meaning that relatively fewer resources are extracted or consumed to create structures; and the steel used by Remagin has a high recycled content, and can be fully recycled at the end of life (with steel already having well-developed recycling streams with high recovery rates).

By consolidating multiple elements into one solution, Remagin's light gauge steel framing (LGSF) systems not only offer a lower-emission solution (with fewer vehicle movements required to and from site), but also create safer and more efficient sites with fewer transport movements on site and reduced requirements for site operatives. Finally, as the solutions are made in controlled factory conditions, manufacturing waste is minimised, and the accurate pre-assembly of the product virtually eliminates site waste (as well as enabling 20-40% faster build times).