



Construction and demolition waste accounts for more than a third of all waste generated in the European Union. It contains a wide variety of materials such as concrete, bricks, wood, glass, metals and plastic. In North America, the statistic climbs even higher, and according to a report from Transparency Market Research, construction and demolition waste will nearly double by 2025.

Fortunately, a paradigm shift is upon us. As a result of stricter, costlier environmental regulations, progressive business practices of large international players like Delta Development, enlist buildings as an investment in the future. To demonstrate this business model, Delta established Park 20|20, a template for a completely recyclable business park in The Netherlands. The Cradle-to-Cradle design conceived by world-renowned firm [William McDonough and Partners](#) has set the bar for buildings to be designed and constructed so they may be completely demountable, reusable and recyclable at end-of-life.

This new vision for buildings as material banks requires the use of clean, pure, yet durable materials, and steel leads the way as the most recyclable construction and demolition material. After a building is demolished, “pretty much all steel will get recycled,” Kiel Moe, McGill University professor of architecture told Metropolis Magazine in 2019. In fact, steel is the most recycled material in the world.

Stainless steel’s ability to provide robust, sustainable construction without a surface coating means that it will always be recovered and easily recycled. Companies looking to minimize their chemical footprint and optimize indoor and outdoor air quality use stainless steel because it stays clean and vibrant without the use of hazardous cleaning products. The material is 100% recyclable which directly correlates with minimization of waste. Additionally, recycling stainless steel involves no hazardous materials.

As a metal fabric product, the embodied carbon footprint of GKD’s stainless steel mesh is reduced by the high percentage of post-industrial and post-consumer recycled content. Furthermore, 100% of the scrap metal material is recycled during manufacturing. Because metal mesh is constructed of stainless steel or other non-degrading alloys, there is no timeframe for removal or replacement except in the case of remodeling, renovation or changing customer needs. However, in the life of a building installation, stainless steel metal fabric may be removed and recycled at any point while retaining its inherent qualities in the process.

The use of GKD stainless steel and metal fabric in architectural design and construction is an environmentally responsible and resource-efficient choice. It positively impacts the circular economy and supports the evolution towards modular, demountable buildings as material banks of the future.

HEALTHIER, CLEANER AND SAFER

This article is part of a series focused on evolving sustainable technology and how GKD Group is working with our customers to solve sustainability challenges around the world. [Learn more](#) about our vision for a healthier, cleaner and safer world.