

TACKLING CARBON FOOTPRINT IN THE CONSTRUCTION INDUSTRY WITH SUSTAINABLE OFFSITE CONSTRUCTION

Our world is fast approaching a tipping point. The human population has doubled since 2007, yet the species population has declined by a staggering 68%¹. Rising temperatures caused by greenhouse gas emissions are causing entire ecosystems to collapse. As a nation, we cannot afford to wait any longer. The threat to our existence is real and urgent; we're on borrowed time. We must act – and now, because every moment we delay, we risk losing more of our planet.



The push for net zero carbon emissions is a shared ambition and focus that is being driven by not only legislative requirements, but also by societal demands and changing expectations. The UK government has responded to The Paris Agreement's target of limiting global warming to below 2 degrees Celsius above pre-industrial levels by setting a goal of reaching net-zero carbon emissions by 2050. However, compliance is not the only reason companies must focus on sustainability; society is also putting pressure on businesses to become more environmentally friendly – and future generations will not forgive us for not taking action whilst we were able.



Reducing global carbon emissions is an imperative that demands immediate action, particularly for the construction industry. This sector is a significant contributor to global CO₂ emissions, accounting for 38% of total global emissions; at any one time, a city equivalent to the size of Paris is being constructed every week². **As such, the construction industry has a crucial role to play in mitigating the impact of climate change.** Sustainable practices must be adopted, and we need to take a stand and lead the way in reducing our carbon footprint. Buildings and construction are essential, but we must alter the way we work to minimise CO₂ emissions as far as possible. By acting collectively as an industry, we can make significant, incremental positive differences to the planet and ensure a sustainable future for generations to come.



¹ WWF biodiversity report 2023

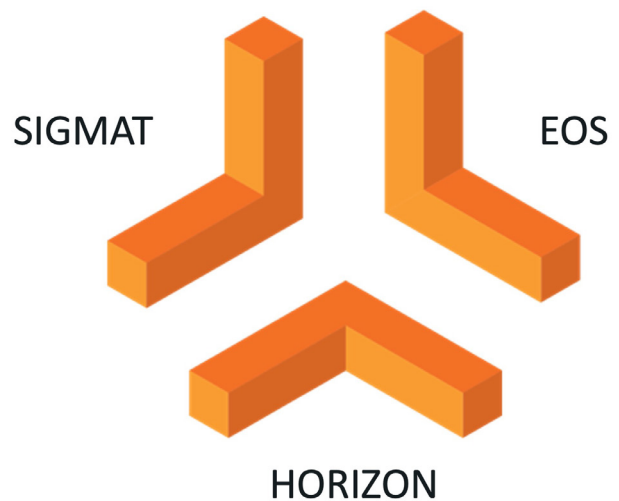
² Matthew Black, World GBC Circularity Accelerator Programme Co-ordinator

Reducing carbon emissions is a complex issue that requires a multi-faceted approach. Whilst greater legislation and technological advances will be necessary to achieve transparency and consistency, companies can start to act now in many ways.

Companies can transform their construction processes by implementing energy-efficient practices, from material sourcing to onsite operations. They can commit to using more sustainable building materials, reducing waste, and adopting innovative construction techniques that minimise energy consumption.



Other effective methods include switching to renewable energy sources, optimising supply chain logistics to reduce transportation related emissions, and investing in product innovation to develop more sustainable building solutions. There are a wealth of opportunities that will have a real net gain impact. By combining these strategies and adopting a holistic approach to sustainability, construction companies can play a crucial role in mitigating climate change and achieving a more sustainable future, ahead of legislative demands or technological advancements.



Remagin, comprising of the former Sigmat, EOS and Horizon brands, is a prime example of a construction company taking a holistic and innovative approach to reducing carbon emissions. This new brand showcases a movement towards a more sustainable future by integrating the three legacy companies and their product technologies, capabilities, and solutions to create complete offsite building systems that offer greater lifecycle, sustainable, and commercial benefits.

By consolidating several elements into one solution, its light gauge steel framing (LGSF) systems not only offer a lower emission solution, with fewer transport movements going to and from the site; but also result in safer and more efficient sites, with a reduced requirement for site operatives; the virtual elimination of site waste due to the accurate pre-assembled nature of the product; and, not least, 20-40% faster build times.

Remagin's innovative approach is a clear example of how construction companies can balance commercial successes whilst tackling climate change.