

WICONA MEETS: Phil Sedge



Conflicting aims, complex challenges... Those brief descriptions could serve as a sum-up of the building and construction industry's road to sustainable reinvention.

Consider this:

By 2050, more [than two-thirds of the world's population](#) is projected to live in cities — up to some 7 billion people. Meanwhile, as of 2021, the construction sector is responsible for 39% of total global energy-related CO₂ emissions worldwide.

Now let's add to the equation that the industry aims to reach net-zero carbon emissions by 2050, and the conflicting aims and — even more — the complex challenges, become evident.

As the global population keeps swelling, so does the need for housing. [The increase in global gross floor area](#) between 2015 and 2021 is equivalent to the total land area covered in buildings in Germany, France, Italy, and Netherlands combined. To give an idea, if we envision that as one, huge floor, it would stretch for 24,000 km₂.

Indeed, with those figures in mind, you're hard-pressed to imagine how the simultaneous aims of responding to housing needs and our planet's health needs could be squared. And yet, there are

transformations afoot that many experts believe hold out hope for a buildings and construction industry that can continue to grow without putting the health of the planet at risk.

[A recent cross-sector, global study](#) carried out by German software company SAP shows that executives in the engineering and construction industries have made the most progress toward sustainability in the design phase, where 47% of respondents said sustainability is top-of-mind or a major concern.

In the last decade alone, that sentiment has translated into a long list of sweeping changes in the way buildings and infrastructure is conceptualized and designed. At the top of the list, we find an increased use of biodegradable materials, green insulation, water efficiency technologies, self-powered buildings and ramped-up use of renewable energies.

Still, there are miles to go. According to the SAP study, nearly half of the 1,000 respondents said increased process complexity is an obstacle to meeting their sustainability goals. Creating a sustainable supply chain means complex management of the whole project lifecycle, from the conceptual stages through to hiring the right people, sourcing the right materials, supplies, and equipment to the site. And compounding that challenge is also the continuous operation and maintenance of the finished project.

Today, the sector's energy consumption and CO₂ emissions have rebounded from the COVID-19 pandemic to an [all-time high](#), as the rapid growth in floor space outpaces efficiency efforts.

And so returning to the question about the feasibility of the sector's quest to go green, we know from the progress made in other sectors — such as cleantech and renewable energy — that there's no one effort or solution that can bring an entire sector to a carbon tipping point. Rather, success in building a sustainable construction sector hinges on stakeholders across the value chain.

That means a consolidated effort on behalf of the private and public sectors, combining practical climate regulation, further investments into energy efficiency, an acceleration of new technological inventions, as well as a bonafide burst of creativity from the frontline architects and entrepreneurs who design and build the cities of the future.

This is one of the topics we discuss in our latest episode of **WICONA MEETS**, to be launched on December 19th. Our team ventured to London to talk to Phil Sedge, Head of Facades at Mace Group. Kicking off his career in the late 1980s, Phil has spent over three decades working in facades building prestigious projects across London while working with the industry's leading façade contractors. At Mace, Phil leads the way on innovations and industry drivers like productivity, quality and carbon initiatives.

We launched **WICONA Meets** to provide some answers to what architecture has in store for us, but also as an effort to inspire and spark a conversation about the endless possibilities of **build beyond tomorrow**. Today, the professionals shaping our cities are more than ever required to find new, creative solutions to balance aesthetics with the demands for environmental stewardship and a rapidly growing urban population.

Watch the episode here: [WICONA - YouTube](#)