

Breaking the supply demand deadlock in the built environment

The built environment - which encompasses all homes, offices and public infrastructure - accounts for over a third of total global greenhouse gas emissions. To combat the negative impact this industry has on fragile ecosystems, deep systemic change is needed to transform the ways in which we build and manufacture.

At MIPIM, it was announced by the UN that 96,000 houses need to be built every day. With the built environment continuing to increase its emissions, sustainable building solutions are more necessary than ever. In regions such as Europe - where all new buildings must meet minimum energy efficiency standards or operate at net-zero by 2028 - measures have been put in place to try to reduce these impacts. However, the road towards a net-zero built environment is far from straightforward, particularly when for every \$1 spent on energy efficiency, \$37 is spent on conventional construction approaches. In order to reach these goals, the industry must find a way to balance stringent regulations and unbridled innovation.

The paradox of regulation

It's often thought that the most efficient way to reduce carbon emissions is to introduce or improve building regulations. For example, the *Future Homes Standard* pledges that all houses built from 2024 onwards in the UK shall produce 75-80% less carbon emissions than homes completed under current regulations. However, regulations can hit industries that are not prepared, or cause compliance headaches, inability to source low carbon materials and products, and soaring costs. Beyond regulations, enabling environments through measures such as incentive schemes, upskilling etc, create the conditions for change.

How are building owners and managers expected to meet new or updated regulations if they don't have the building materials and other solutions required to comply? If decision-makers and regulators expect an industry to renovate and construct buildings in line with sustainability standards, especially in a short time-frame, all stakeholders across the value chain must quickly adapt. There is no shortage of information and guidance about what this means in practice, but the reality is that manufacturing companies do not always have readily-available materials to do so. Regulatory frameworks need to be bold in order to catalyse climate action aligned with best practice, inspired by the proven approaches by industry frontrunners, with accompanying clear milestones to ensure that markets can deliver the intended outcomes.

The supply-demand dilemma

Corporate buyers crave cost-effective, sustainable solutions, whilst innovative startups (who are at the forefront of creating these solutions) struggle to secure the scale of demand that helps bring their costs down. The traditional manufacturing practices within the built environment industry need a strategic overhaul, to align the needs of suppliers and consumers and propel the industry forwards, towards its net zero goals.

A strong and committed pipeline of demand is required to activate a flow of investment into these solutions before regulation can even be considered. This will ensure supply chains can adapt accordingly. Once regulations are implemented, mainstream demand is inevitable: building companies will all want to jump onto the latest climate tech solutions that enable them to meet regulations.

Startups need to be supported to build these solutions without their prices skyrocketing. While regulatory measures may be essential in accelerating net-zero buildings and retrofits, the materials and solutions needed can't be scaled

without the necessary capital.

Investment as the true initiator

Capital investment is a true amplifier of innovation. The private finance sector – from venture capital (VC) firms to angel investors – plays a crucial role in connecting innovative startups that are developing sustainable materials with corporates that are scoping out market-ready technologies to address their emissions. In turn, this creates an ecosystem that encourages the development and uptake of more sustainable solutions, driving the built environment towards net-zero.

VC firms' level of commitment and ability to identify promising solutions, provide technical knowledge and an abundance of industry relationships are crucial to accelerating the growth of startups from ideas to market-ready technologies.

The obstruction of politics

Over half of the world's population is set to vote in an election in 2024, which could possibly pose a threat for established net-zero roadmaps. Rotating political parties come with changing priorities over regulations, financial incentives and industry support.

The private sector will become crucial in dealing with the fallout of the political cycles, as well as public discourse around the importance of tackling climate change. VC firms have the ability to foster a more stable and consistent approach to transformations within industries, ensuring that regulatory change delivers value for society, and that any short and long-term goals can be reached. And forward thinking corporates can identify the value case of pursuing high performance outcomes of their assets – in advance of regulatory drivers.

Collaboration is key

Of course, decision-makers in the built environment industry are aware of the challenges that incoming regulations might bring. But, they are also aware of the opportunities that can arise from them, and our urgent need to drive down emissions from the sector. By aligning interests and working effectively alongside regulations, the market can deliver cost-effective solutions, breaking the deadlock in the supply-demand dilemma and creating a more sustainable and resilient built environment.

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