

A man with a goatee, wearing a dark suit jacket over a blue and white checkered shirt, stands on a balcony. He is holding a pair of glasses in his hands. In the background, a large white wind turbine is visible against a clear blue sky. Below the turbine, there is a building with a brown roof and a row of windows. The overall scene is brightly lit, suggesting a sunny day.

Q&A

Inbuilt

David Strong, Chief Executive of specialist consultancy Inbuilt Ltd talks to MMC about design considerations.



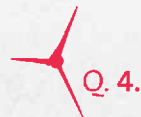
As part of the RES Group, will your role primarily be concerned with promoting renewable technologies, or will you cover such disciplines as architecture, engineering and the design of project infrastructures?

The RES Group (one of the world's leading wind and renewable energy companies) is Inbuilt's parent company, but we are a completely separate entity and our role is to provide consultancy advice that addresses sustainability in the round. We are not apologists for any particular technology. In fact, in many cases we believe there is scope for designing out technical complexity, reducing dependence on any sort of technology and using passive design features instead to boost the natural lighting, heating and cooling of buildings. We have a very important design service headed by up award-winning architect Lynne Sullivan, plus a wide range of other services to help deliver low carbon buildings and sustainable communities.



In your literature you speak about drawing inspiration from nature. Can you give us some examples of how this works in practice?

At Inbuilt, we work together as a team to find natural solutions to reduce our dependence on energy-intensive systems. One of our areas of expertise is bioclimatic design, so this means we work at the earliest stages of a building's planning and design to find ways to harness the benefits from the local climate, the orientation of the building, the geographical features around it and the appropriate use of materials to reduce energy demands for heating and cooling a building.



Who are the Inbuilt team, and what sort of benefits come from their involvement in client projects?



Q. 5.

Do you think the right technologies are in place in order to achieve the 2016 Government target for zero carbon new homes?

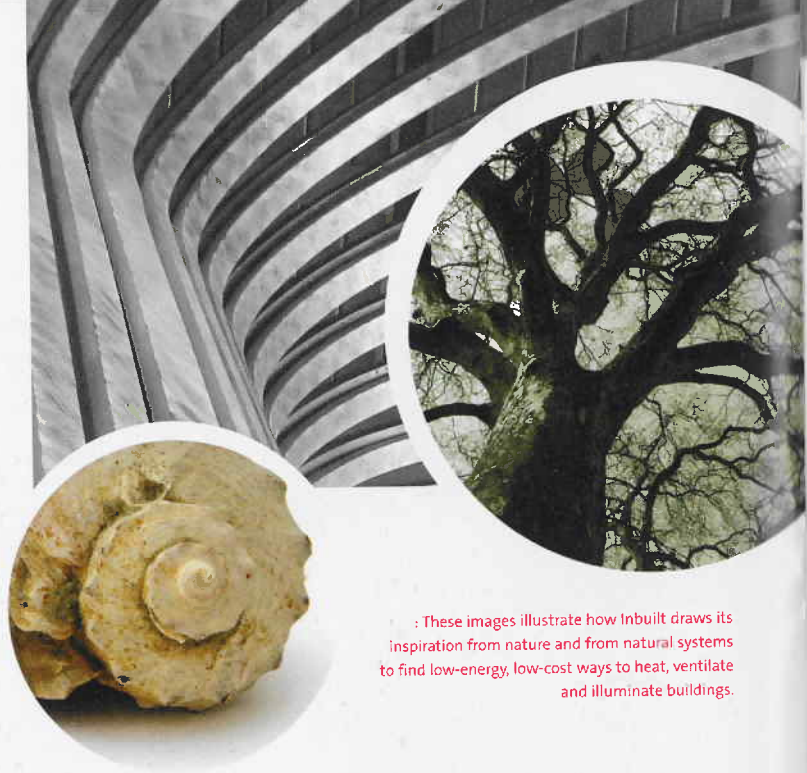
Actually I have severe doubts about this. Inbuilt recently conducted a targeted survey where we could speak at length with senior managers in seven of the UK's largest national housebuilding firms. At first almost all of them said they thought the 2016 target was achievable, albeit with significant caveats. As our discussions continued, their discomfort became palpable, expressed in warnings about the unrecoverable costs, the lack of reliable technologies, supply chain, skills or expertise, and the trouble accessing renewable energy sources. Consequently, when we asked the 64 million dollar question about whether the housebuilding industry can actually deliver under the existing rules, there was a mixed and mostly pessimistic view – from 'yes, but...' to 'very unlikely' and 'extremely difficult', with one outright 'no'. I get a very clear message from all the housebuilders we speak to: the Government has got to simplify its definition of zero carbon and allow builders to access at least some offsite-generated renewable electricity from certified, additional sources if we are going to stand a chance of meeting its aims for 2016.



Q. 6.

So what advice can you give to any developer currently battling with the zero carbon agenda?

Our key piece of advice is to start your thinking very early, and to adopt what we call 'whole system thinking'. There are risks that some developers might seize the first technical solution they can afford, rather than taking the long-term view or considering the broader sustainability implications of their



These images illustrate how Inbuilt draws its inspiration from nature and from natural systems to find low-energy, low-cost ways to heat, ventilate and illuminate buildings.

decisions. This could lead them into technical cul-de-sacs which cost a fortune to back out of later on. There is much more to delivering exemplary built environments than zero carbon. Real success comes from collaborative, multi-disciplinary, integrated team working like the industry has rarely seen before. For example, Inbuilt tends to be appointed on day one, collaborating with the client, the local community, the architects, planners, building control authority, sub-contractors, energy suppliers and the entire supply chain. It's a different way of working. Together we can find solutions that address and resolve multiple problems and issues simultaneously. It's amazing how much time and money can be saved this way – and deliver successful, high quality buildings at the same time!

“Real success comes from collaborative, multi-disciplinary, integrated team working like the industry has rarely seen before.”

David String, Chief Executive of Inbuilt Ltd