David Strong on building 'brand zero'

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Chief executive of Inbuilt and founder of the UK Green Building Council asks how feasible is a zero-carbon built environmer

The government's fixation with zero carbon took an interesting turn in last month's Budget. A consultation will be held this year on the timeline and feasibility for all new non-domestic buildings to be zero carbon by 2019. But how realistic is it to expect all new commercial property to reach zero carbon by then? And is it the right ambition for the nation in the first place To answer this, perhaps we can begin by looking at UK housebuilders' experience of zero carbon.

Here we sail gently into a warming swell of welcoming words ... followed by an icy tidal wave of grief. For housebuilders are now realising the timescales are horribly short. Allowing for the time required to design, specify and fund a development of code level six new homes by 2016 actually means having all the answers to the zer carbon challenge by about 2012 – just four years from now. And housebuilders working in the social housing sector are having to learn even faster, producing cod level three or four homes already.

A recent poll by Inbuilt of major housebuilders showed that they all welcomed the government's green ambitions and agreed absolutely that new build had its part to play. But the reality of delivering zero carbon was quite different. Their discomfort was palpable, expressed in warnings about unrecoverable costs, the lack of reliable technologies and expertise, and the trouble accessing renewable energy sources.

At the moment the temptation for housebuilders to jump on the first technical bandwagon is enormous. Any supplier that claims to deliver a solution that looks anything like affordable is doing rather well. Unfortunately, many of these solutions ar cul-de-sacs that deliver short-term shareholder value now but will ultimately cost a fortune to back out of.

In the UK commercial property sector, the challenges are even more demanding. Given the huge diversity of uses and the energy intensity of such buildings, can we honestly ever hope to deliver genuinely zero-carbon outcomes?

Well, everything is possible. It just depends on your definition of success. So let's look again at the housebuilding sector. Unfortunately here again we find that the current definitions of "zero carbon" are highly problematic, which means there is r consensus on what success looks like. That's subject to yet another consultation this year.

But if the same definition of zero carbon currently used for housing is applied to new commercial buildings, with the same requirement for on-site renewable energy rather than access to certified additional renewable capacity via the national grid then I fear we're firmly in the realms of science fiction.

Having tough environmental targets is fine with me and, encouragingly, it's generally supported by all our clients. But befor "Brand Zero" gets any bigger, let's stop and decide whether we are honestly aiming for the right target – or is the 'best' in danger of becoming the enemy of the good?

Take housebuilding again. We're already seeing the perverse outcomes of an environmental agenda that is ill-defined and risks ignoring the economic and social aspects of sustainability. We are at risk of ending up with zero-carbon, code level si homes that are uneconomic to maintain, are built on flood plains, overheat in summer, have poor acoustic performance, po indoor air quality or other unintended consequences. We can't call that sustainability.

To reach a genuinely sustainable 2019, we need to undertake a full strategic review of our design and construction conventions. We need to get on with collaborative, multidisciplinary, integrated team working like we've rarely seen before. Also, with over 70% of our 2050 building stock already constructed, we need a national strategic plan (with real carrots and sticks) to stimulate the take-up of cost-effective energy efficiency measures within the existing stock.

Adopting this approach is the only sure way to avoid the "law of unintended consequences" that strikes when projects take too narrow a focus, concentrating on saving energy, water or other resources rather than considering sustainability in the round.

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