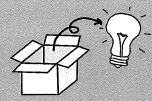
Q&A Article|

Thinking outside the box



An accomplished academic with a doctorate in Natural Resource Management and Ecology from Imperial College in London, Dr Toyne is the author of numerous reports and papers on sustainable development. Also Director of Sustainability at Balfour Beatty, Juliet Woodcock questions him about sustainable development.

How do you see the balance being struck between preserving London's architectural heritage and addressing the poor energy performance of its millions of solid wall properties, targeted for over cladding under the Government's ECO initiative?

A balance does need to be struck: a sensible approach in my view would be to treat public sector buildings across the capital with low architectural heritage value for energy efficiency improvement treatments which could include

Treatment for buildings with high architectural heritage values should be on a case by case basis, with an acceptance that for some buildings that will continue to be energy inefficient and it's the price we pay for keeping the building original integrity. In these cases, efforts should be made on ensuring the supply of energy is from low carbon sources and as much as possible is done to reduce energy demand.

Given the growing population and the need for economic growth, do you see a point where improved energy performance and other sustainability measures will actually reduce the strain on resources, including fossil fuels?

If today's sustainability measures do not reduce the strain on resources, then we will have missed

Current activities are taking us on a course of resource efficiency, which is very helpful but won't tackle increased consumption rates that result from a growing affluent population. This presents a problem: and I don't think globally we have the right measures in place to plan for a population of 9 billion people, in a world with declining natural resources and a changing

We have some way to go before we have the right measures – but concepts such as cradle to cradle and the circular economy are gaining political acceptance and are a step in the right direction. Progress is slow in trying to stabilise atmospheric pollution; and we aren't at a stage where we are restoring the world's natural

capital. That is worrying: however that should not stop us trying, here commerce has a role to play and many - like Unilever and Kingfisher - are trying with new business models that strive to grow their activities whilst using less resources.

Balfour Beatty has placed the principles of sustainable development at the heart of its strategy, that is why for me, this new role within the company is exciting and why I believe we are well placed to continue to make a positive contribution.

How far has Balfour Beatty progressed towards its ultimate goals on reducing energy and water usage?

Balfour Beatty's UK Construction Business is on or ahead of its targets for reducing energy and water usage. In September 2009, Balfour Beatty launched its 2020 Vision outlining specific business objectives for all key areas of sustainability

Around environmental limits regarding energy, a 50% reduction in greenhouse gas emissions against a 2010 baseline was set as a target for 2020. Similarly for water, a 25% reduction in potable water use was set as a target for 2015 with future water targets to be assessed.

We have made considerable progress in measuring and reporting data from our operations and this has been independently

With your background in practically every aspect of sustainability surrounding the built environment, what do you see yourself bringing to Balfour Beatty in particular in your new role as Sustainability Director?

There are a few things that come to mind; namely driving an evidence-based approach to delivering our sustainability strategy; making sense of the numerous interventions we make and shaping them into an integrated programme that instils pride in what we do, and helping our customers ask the right questions so that they get better value from contractors like us and at the same time better, more sustainable assets: hopefully built by us.

With the latest statistics looking disappointing regarding infrastructure, what do you think the government or the construction sector can do to get this moving?

Investment is essential. We know we need to upgrade our country's vital infrastructure, so attracting investment is the big issue. The government has a role to play here, particularly in attracting foreign investment: and so does the construction industry as a whole. To get things moving contractors need to demonstrate how more integrated working across the built environment involving professionals, will help manage risks in the project cycle.

If today's sustainability measures do not reduce the strain on resources, then we will have missed the point!

These risks can dent investor confidence. Clearly use of BIM and other tools can help, as can evidence of how the supply chain are fully integrated and up to speed with the project. De-risking and showing how it is fit for purpose are means to reducing build costs, delivering the programme more efficiently, safer and with less environmental impacts. And of course having an investor that is in at the start would be helpful so whole-life costing could be more meaningfully applied without the thorny issues of capital expenditures versus operational and maintenance costs being raised; with the associated dumbing down of sustainability related performance.

So do you see sustainable business strategies as integral to creating confidence amongst investors and project partners?

Risk Evaluation And Prevention, or REAPS are key to knowing where you are going and not waiting until you get to a point where you cannot take corrective action or intervention to ensure success. This is common sense and a form of risk evaluation. We should view environmental impact as an opportunity for business benefits as

Paul chairs the Constructing Excellence Sustainability Task Force and the Green Construction Board's 'Greening the Industry' Carbon Group. Appointed by the London Mayor, he is a London Sustainable Development Commissioner, deeply involved in chairing its Quality of Life work amongst

Paul's diverse background includes working for the WWF on international development and sustainable trade; Global Sustainability Director at WSP, where he led the establishment of services for the design of 'future' cities; and as Head of Sustainability at Bovis Lend Lease UK where he was the architect of an award-winning approach to sustainability during a period which included the delivery of highly sustainable construction projects such as the London Olympic Village and Media City at Salford Quays.

