

INSIGHT#3 : RESPONSIBLE SOURCING

On the London 2012 Olympic Park, 170,000 tonnes of recycled and secondary aggregate were used. This accounted for almost a quarter of the concrete content on the project and saved 30,000 tonnes of embodied CO₂. Rationalisation and design efficiency reduced the concrete demand by 65,000m³, further reducing embodied CO,

More than 90% of BES 6001 certified concrete is rated Very Good or Excellent

ith increased globalisation, the movement of goods and people has added to the complexity of supply chains and procurement practices. This raises concerns about labour practices, how goods

are produced and their environmental impact.

During 2008/9 the concrete industry's sustainable construction strategy adopted BRE's responsible sourcing certification scheme, BES 6001, with the target of achieving 95% certification by 2020. Both concrete product companies and supply chain manufacturers were encouraged to obtain BES 6001 certification, and the industry published guidance detailing more industry-specific explanations of the scheme requirements.

With well-defined, closely controlled and predominantly

local supply chains, in 2016 the industry was able to produce 90% of concrete, 100% of cement, 100% of GGBS and 93% of aggregates to BES 6001. More than 90% of the concrete certified was rated Very Good or Excellent.

Clients can also achieve credits for responsible sourcing within

THE CONCRETE INDUSTRY WAS MORE THAN **80%** COMPLIANT WITH BES 6001 WITHIN 12 MONTHS OF ITS LAUNCH IN 2008

the BREEAM, Home Quality Mark (HQM), CEEQUAL and LEED sustainability assessment schemes. For example, BREEAM UK New Buildings has, in its Mat 03 materials section, calculation methods with up to three full credits available, while Section 18 of the HQM scheme, "Responsible sourcing of construction products", offers up to 28 credits.

The social aspects of responsible sourcing are becoming more prominent and labour practices are under greater scrutiny. Industries that import into the UK must be particularly vigilant. There has also been a recognition. with the introduction of the Modern Slavery Act 2015, that the UK needs to ensure that its own labour practices are fair and ethical. Using products that are certified as responsibly sourced is an important way to ensure transparency and that highest ethical standards are met.

Construction workers at labour supply company VGC Group, one of the first to achieve the BES 6002 verification standard on modern slavery, launched by BRE in 2017

ORGANISATIONS WANT TO WORK WITH OTHERS WHO SHARE THEIR VALUES'

Dr Shamir Ghumra is BREEAM director at BRE

What were the drivers for BRE to set standards BES 6001 and BES 6002 on responsible sourcing and ethical sourcing respectively?

BES 6001 has been around for about 10 years. Before, there was nothing for the general construction products sector to reference for responsible sourcing. Now there is BES 6001 and BSI's BS 8902. As the landscape has evolved with more awareness of modern slavery, BES 6002 was introduced to reflect these social and ethical governance considerations. BRE felt it was an opportunity to trial a different approach with a broader appeal not only for the construction product sector but for contractors, clients, designers and architects. Whereas BES 6001 is a certification scheme, BES 6002 is a verification standard where an organisation reflects

on its own performance and makes a commitment to continually improve.

What impact have they had?

BES 6001 has had a significant impact with a wide adoption in the concrete sector. Slowly and surely it's growing, with evidence that it's starting to gain traction in other product sectors and in different parts of the world. BES 6002 has only been around for just over a year. Precast and natural stone company Marshalls was the first to achieve verification followed by Sir Robert McAlpine and labour company VGC.

We currently have another six going through verification including clients and contractors.

How might each evolve?

BRE has just made BES 6002 more accessible through the creation of an online platform with a digital version of the standard (www.elsonline.co.uk) where companies can log on and self assess for no fee or resources other than their time. After just two months, we have 60 organisations self-assessing and within a few years we want to have thousands. More and more organisations want to work with others who share their values on issues such as ethical and social governance.

We're now in the process of updating BES 6001 to version 4.0, which will be finalised in autumn 2019. It's got plenty more life in it, in particular going digital and the potential for growth internationally.

Are there any other initiatives relating to responsible sourcing?

We have the Action Programme for Responsible and Ethical Sourcing (APRES), which was set up by Loughborough University and acquired by the BRE in 2015. APRES is a very useful sounding board for thought leadership on responsible sourcing.



IN PRACTICE

Canary Wharf Group

"Our overall message on sustainability is about resilience. We provide a really robust, flexible shell-and-core model that can be adapted to suit different tenants. That's inherently sustainable because it lends itself to a longer life. We design to the Eurocode, which specifies a building design life of 50 years. But we know that concrete can have a much longer lifecycle and we certainly don't intend to tear our buildings down after just 50 years.

Because we're the client, contractor, developer and landlord, we're having this dialogue all the time. We set out as a fully integrated team to develop the most sustainable solution that we can, applying our own, very detailed sustainability brief on all projects. It covers six major elements: tenant fit-outs, refurbishment, biodiversity, sustainable procurement, zero waste, and health, wellbeing and productivity. Only after we've considered what we can achieve through that do we do a BREEAM



pre-assessment – and guess what? Through this approach, we're able to achieve Outstanding. When we've used BREEAM as a checklist, it's been challenging to achieve even Excellent [the level below Outstanding].

For our supply chain, it's a given that we only use concrete certified to BES 6001 and we already do a whole-life carbon analysis of our developments. But we will be going a lot further in future, considering the lifecycle of our major materials and supply chain in light of the Paris climate agreement. We will work with our suppliers to explore how, as a team, we can deliver zero-carbon concrete. That's what we've got to get to, and that's where we're going."

Martin Gettings is group head of sustainability at Canary Wharf Group

Photo: Crossrail Ltd



Over 200,000 concrete segments line the 42km of tunnels of London's new east-west Elizabeth Line. All materials on Crossrail had to be procured to high ethical standards. The concrete industry was able to demonstrate compliance because concrete is locally sourced and the BES 6001 standard has been widely adopted