

PHOTO CREDIT: ROGER HUNT



The environmental impact of quarrying is a consideration when procuring stone

# Digging around

Building sustainably is as much about the procurement process as it is the types of products selected. ROGER HUNT looks at the systems in place helping housebuilders make the sustainable choice



The government's Sustainable Procurement Task Force devised a definition for sustainable procurement. It is, it states, "a process whereby organisations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy, while minimising damage to the environment."

Since the complexities of the supply chain are even more complex than this sentence, it is clear that meeting the goals of sustainable procurement are challenging, especially for an industry as diverse as housebuilding. Contractors typically spend around 80% of their turnover on the procurement of goods, works and services, points out Steve Cook, principal sustainable development manager at Willmott Dixon.

"Procurement decisions made by individuals typically revolve around cost, specification, fitness for purpose, client drivers and availability. However, there's a pressing need for the industry to consider sustainability aspects during procurement; nobody wants deliberately to procure products which could be illegal, are from unethical sources or which could have health implications," says Cook.

Timber is frequently lauded as a naturally renewable material, and one of the most sustainable forms of construction available, but this is only the case if it is grown in sustainable, controlled forests and can be procured with 100% certainty of the chain of custody, from planting through to final use.

This means that companies like Stewart Milne Timber Systems must work closely with suppliers to ensure that the timber-based raw materials used in their products come from legal, managed and sustainable sources. Alex Goodfellow, group managing director, explains that the company buys direct from the same mill owners that manage the forests the wood is sourced from.

"Having that relationship gives us a deep insight into sector capacity, which, in turn, gives us the flexibility to plan for periods of heavier demand. Our principal



suppliers of timber, engineered wood products and wood-based panels are registered under the internationally recognised PEFC (Programme for the Endorsement of Forest Certification) and FSC (Forest Stewardship Council) chain of custody schemes."

Similarly, Andrew Carpenter, chief executive of the Structural Timber Association, explains that the STA and its members operate by a Code of Practice that has sustainability and environmental responsibility at its core, with a 'cradle to grave' mentality in mind throughout the process.

"From the forestry side, a key part of our Code is that the timber used by our members should be

sourced from well-managed, sustainable sources. Once raw materials have reached the factory floor, our members aim to reduce wastage of raw materials, which further enhances the whole-life energy efficiency of developments."

Before 2008, timber was the only construction material that could be recognised as responsibly sourced says Steve Cook who, along with his role at Willmott Dixon, chairs the UK Contractors Group (UKCG) task materials group. "One of the focuses of this task group is to drive the market preference for materials that are certified as responsibly sourced. Dialogue between manufacturers and

## THIS PAGE

**ABOVE** Stewart Milne Timber Systems' Sigma II Build System offers closed-panel solutions made in the factory

**ABOVE RIGHT & RIGHT** Timber should be sourced from well-managed, sustainable sources registered under the internationally recognised PEFC and FSC chain of custody schemes

**RIGHT TOP & BOTTOM** High sustainability standards are set at Linden Homes' Graylingwell Park

## OPPOSITE PAGE

**TOP RIGHT** Suppliers like SIG360 are ideally positioned to bridge the confusion between customers and manufacturers

**BOTTOM RIGHT** Stewart Milne Timber Systems' Sigma II Build System offers closed-panel solutions made in the factory

**BOTTOM MIDDLE** The Serpentine is a modern interpretation of the traditional Victorian terrace designed for Thames Valley Housing by Make Architects using Stewart Milne Timber Systems' Sigma II Build System

**BOTTOM** SIG360 NewBuild helps housebuilders to easily source the products they need, all from one place





the BRE opened up the possibility of a new material neutral responsible sourcing credit in the then new Code for Sustainable Homes and BREEAM," explains Cook.

In 2008 the BRE launched BES 6001, a standard for the responsible sourcing of construction products. Shortly afterwards the BSI published BS 8902, which provides a framework for the development of sector-specific responsible sourcing certification schemes for construction products, and, by 2011, the Sustainable Concrete Forum reported that 92% of ready-mixed concrete produced in the UK was certified as responsibly sourced.

Today the UKCG maintains a register of all responsibly sourced construction products, which is updated regularly, and there are nearly 100 companies with construction products certified to recognised responsible sourcing schemes.

At Willmott Dixon, a group Sustainable Procurement Policy has been developed with board level support. "It's important that a procurement policy is not just restrictive but also captures the opportunities to increase efficiency; for example, through more efficient plant and equipment or transport and reduced waste, especially by means of material take-back schemes or reductions in packaging," says Cook.

Willmott Dixon is a founding partner of the Supply Chain Sustainability School. Launched in 2012, this provides a common approach to addressing sustainability within construction supply chains. The School offers free practical support in the form of e-learning modules, tailored self-assessment and action plans, sustainability training and networking opportunities to improve the knowledge and competency of the supply chain.

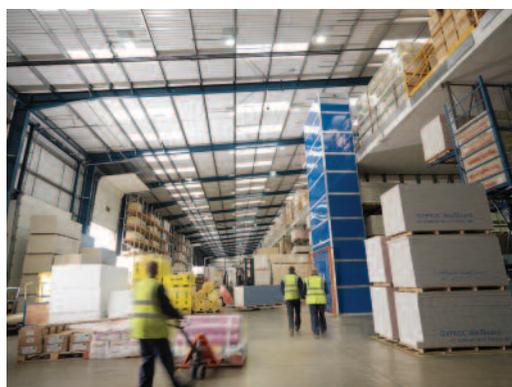
The School's partners include Galliford Try. At Linden Homes, Galliford Try's housebuilding division, Graham Hutton, group technical director, believes the School helps the company pass on its discoveries and learn from the sector so it can stay at the forefront in the field.

"We've set up partner agreements, as a group, with our regular suppliers so our expectations are clear. Once a supplier registers and completes the assessment, they will be given a score and their own dashboard showing their performance in key assessed areas. The School highlights areas for improvement and provides access to online training to deliver that development. Suppliers are encouraged to reassess their capabilities after completing the recommended training and their dashboard will show their progress," explains Hutton.

Suppliers are often well placed to bridge confusion between customers and manufacturers so partnering an experienced supplier can be a simple way to access expert product advice. SIG360 NewBuild was set up with this in mind and aims to help housebuilders navigate the industry's latest sustainability standards and provide the products needed.

Andrew Orriss, head of business development at SIG360, sees sustainability as a broad term that is routinely applied to a variety of products with different qualities, compositions and lifecycles, often making it difficult to discern whether or not a product meets specific needs.

"For instance, some would argue that products made from natural materials, which were not or ▶





cannot be replenished as part of the manufacturing process, do not meet sustainability criteria but, in actual fact, products of this nature are still sometimes described as sustainable if their qualities make them suitable to be used in enhancing the thermal performance of a building. Similarly, many would describe a product with recycled content as sustainable, while other customers might be looking for a product that goes that step further by being recyclable itself, achieving a closed-loop approach to sustainability."

At Linden Homes, Graham Hutton highlights another challenge: the willingness of trades to use newer, more sustainable methods. "Changes in approach from contractors are slow as a result of the skills shortage across the industry. Everything

is interlinked – it's called a supply chain for a very good reason."

For manufacturers there are equal problems. At Lime Technology, business account manager Ian MacCarthy believes the supply chain must be better educated and says that the company expends considerable effort communicating the benefits of its Hemcrete walling and other products. "There is still a disbelief that eco-sustainable solutions using Hemcrete can be available at comparable prices, and that the performance really is as claimed."

Another key aspect of a sustainable supply chain is making use of local suppliers. The Social Value Act now requires publicly funded bodies to consider how the services they procure can improve economic, social and environmental wellbeing locally.

"There are increasing reasons for large buyers to think more locally, and smaller businesses, who previously felt they wouldn't be considered or wouldn't have the right offer, should think again," says Ian Short, chief executive of the Institute for Sustainability. "Local and smaller suppliers in many cases are more flexible and innovative, allowing them to be more responsive and, contrary to perception, they're often able to compete on price too. In addition, they often have a lower carbon footprint because of reduced travel and local sourcing solutions."

The Institute for Sustainability's Local Procurement and Supply Chain Toolkit provides detailed information to help SMEs benefit from the increasing focus on local supply chains by large buyers. The toolkit also gives both public and private sector procurers practical steps to apply best practice in their organisation and guidance on how to make it easier for local suppliers to work with them.

Such initiatives clearly indicate that much has been achieved in recent years but Steve Cook believes there is still a long way to go and that the industry cannot afford to stand still. "Society's general awareness of supply chain issues has grown immensely. While the regular flurry of negative headlines in the media has typically been in other sectors, such as food, clothing and electronics, the construction sector, with its often global supply chains, is not immune." <sup>sh</sup>

## CONTACTS

- Institute for Sustainability  
[www.instituteforsustainability.co.uk](http://www.instituteforsustainability.co.uk)
- Lime Technology [www.limetechnology.co.uk](http://www.limetechnology.co.uk)
- SIG360 [www.sig360.co.uk](http://www.sig360.co.uk)
- Stewart Milne Timber Systems  
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- Structural Timber Association  
[www.structuraltimber.co.uk](http://www.structuraltimber.co.uk)
- Supply Chain Sustainability School  
[www.supplychainschool.co.uk](http://www.supplychainschool.co.uk)
- UKCG [www.ukcg.org.uk](http://www.ukcg.org.uk)
- Willmott Dixon [www.willmottdixongroup.co.uk](http://www.willmottdixongroup.co.uk)



**ABOVE LEFT** Stewart Milne Timber Systems' Sigma II Build System offers closed-panel solutions made in the factory

**ABOVE RIGHT** Timber should be sourced from well-managed, sustainable sources registered under the internationally recognised PEFC and FSC chain of custody schemes

**THIS PIC** Many manufacturers and suppliers like SIG360 are investing in reducing their operational carbon footprint

Read Roger Hunt's blog [www.huntwriter.com](http://www.huntwriter.com) and follow him on Twitter @huntwriter