Understanding Responsible Sourcing Credits in BREEAM

A brief history of responsible sourcing in UK construction

The responsible sourcing of construction materials is an increasingly discussed topic in sustainable construction. Responsible sourcing considers a wide range of sustainability issues across entire material supply chains, and by doing so encompasses various elements of resource stewardship, corporate responsibility and sustainable procurement practice. Since the mid-1990s BRE has supported responsible sourcing by awarding credits within its building assessment schemes, including Ecohomes and BREEAM. These credits initially related only to the procurement of timber.

Two early drivers for the expansion of responsible sourcing to material sectors other than timber were the Government's Code for Sustainable Homes published in 2006 and the Olympic Delivery Authority's (ODA) Sustainable Development Strategy published in 2007. The early drafts of the Code were based on BRE's Ecohomes and credits were awarded only to timber schemes, however during the public consultation for the emerging Code, the industry argued that the credits for responsible sourcing should be available to any material sector that put in place a responsible sourcing scheme, i.e. that it should be materially neutral and not just apply to timber. The published Code adopted this principle, as did the ODA Strategy. These initiatives provided the impetus to material sectors to think about what a scheme might look like for their product group. As a result, the industry facilitated by its umbrella body, the Construction Products Association began work with BRE and subsequently BSI to develop standardised ways to assess whether a material or product was responsibly sourced.

These initiatives were given further emphasis in June 2008 when a target to complete them was included in the joint government and industry Strategy for Sustainable Construction. Industry committed to work with BRE and BSI to finalise the framework standards.

> *'…a fuller understanding of the sustainability of materials entails consideration of a complex and interconnected set of environmental, economic and social factors.'*
>
> Strategy for Sustainable Construction (HM Government, 2008)

Extensive dialogue ensued and in 2008 BRE published its BES 6001 Framework Standard for the Responsible Sourcing of Construction Products (BRE Global, 2008) followed in 2009 by the BSI BS 8902 Responsible sourcing sector certification schemes for construction products. Specification (BSI, 2009) These new frameworks joined a number of pre-existing schemes for forest products and have enabled the development of responsible sourcing practice within a number of sectors including mineral products; structural and reinforcing steels; and construction plastics.

An overview of responsible sourcing in BREEAM

BREEAM, BRE Global's building assessment scheme, includes credits for responsible sourcing. The aim of the credits is to encourage the specification and procurement of responsibly sourced materials for major building elements. The applicable materials within those elements are defined in the BREEAM Technical Manual (see Table 1, below).

Each applicable material within a building element is assigned a 'tier level'. The tier levels are based on the breadth, depth and quality of the verifiable evidence that the products specified have been produced and handled through the supply chain in a responsible way. This evidence is supplied in the form of independent certification within a scheme. The requirements of certification schemes vary widely and so the different Tier Levels in BREEAM reflect the different levels of performance demanded by different schemes.

The various materials and respective tier levels are then combined to determine a final responsible sourcing credit score. The credit calculation is mass-weighted in order to ensure that the credits achieved are linked to the relative proportions of different materials specified in the building.

Table 1 – Applicable building elements and materials in BREEAM
Applicable building elements • Structural Frame • Ground floor • Upper floors (including separating floors) • Roof • External walls • Internal walls • Foundation/substructure • Fittings: includes stair case, windows (frame and glazing units), doors (internal and external), floor finishes and any other significant fitting or finish present • Hard landscaping.
Applicable materials • Brick (including clay tiles and other ceramics) • Pavers (concrete, clay) • Resin-based composites and materials, including GRP and polymeric render • Concrete (including in-situ and pre-cast concrete, blocks, tiles, mortars, cementitous renders etc.) • Glass • Plastics and rubbers (including EPDM, TPO, PVC and VET roofing and other membranes and polymeric renders) • Metals (steel, aluminium etc.) • Dressed or building stone including slate • Stone and gravel • Timber, timber composite and wood panels (including glulam, plywood, OSB, MDF, chipboard and cement bonded particleboard) • Plasterboard and plaster • Bituminous materials, such as roofing membranes and asphalt • Other mineral-based materials, including fibre cement and calcium silicate • Products with recycled content
Excluded materials • Insulation (covered in a separate part of both BREEAM and CSH) • Fixings • Adhesives • Additives

Recognition of forest certification schemes within BREEAM

Forest certification schemes covering forest management and chain of custody for timber products have been eligible for credits in BREEAM since 1995. Forest certification was first introduced in the BRE Environmental Standard (1995 scheme) to recognise the Forest Stewardship Council scheme (FSC), which was launched in the same year.

In 2002 UK Government established the Central Point of Expertise in Timber (CPET) in order to provide support and guidance on public procurement of legal and sustainable timber. In 2004 CPET completed its first review of forest certification schemes and since then has conducted regular updates, the results of which are fed into the UK Government's timber procurement policy. BRE Global has participated in successive CPET reviews through the CPET Technical Panel. The most recent CPET review was conducted in 2010.

Based on knowledge from the CPET process, BRE Global first created the tier table structure within BREEAM in 2006. This allowed higher credits to be awarded to project teams specifying timber products that had been certified to more demanding standards.

The relative tier levels for forest certification schemes within BREEAM 2011 are based on evidence from the 2010 CPET review (CPET, 2010).

Recognition of BES 6001 and associated sector schemes in BREEAM

Products assessed against BES6001 and associated sector schemes have been eligible for credits in BREEAM since 2008.

The BES6001 framework combines requirements for management systems with thresholds to allow companies to gain recognition for performance against the assessment criteria. Mirroring BREEAM, the scoring system in BES6001 awards companies with a rating ranging from 'Pass' through 'Good', to 'Very Good' and finally 'Excellent'. The tier table in BREEAM 2011 places the four levels of performance in BES6001 alongside the various forest certification schemes.

In order to decide the appropriate tier levels for BES6001 and associated schemes the strengths and weaknesses of BES6001 and the existing forest certification schemes were assessed by BRE Global. Evidence from CPET (CPET, 2010) was used as the core element of this assessment and led to the conclusion that the more demanding, performance based forest certification schemes (namely FSC, PEFC and SFI Chain of Custody) were very strong in the areas of resource stewardship, chain of custody and scheme governance but weaker in considering the management of environmental and social issues throughout the supply chain. BES6001 and associated schemes were found to be strong in the management of environmental and social issues throughout the supply chain, but weaker in the implementation of specific performance requirements for key supply chain risks. Overall the requirements of BES6001 'Excellent' rating were assessed as more demanding than those of the forest certification schemes and so BES6001 'Very Good' rating was placed at the same tier level as FSC, PEFC and SFI Chain of Custody.

Recognition of BS 8902 compliant and other sector schemes in BREEAM

Although not yet fully embedded in procurement practice, the significant take-up of responsible sourcing certification schemes demonstrates that in many sectors there is an appetite for demonstrating supply chain credentials. BS 8902 - *Responsible sourcing sector certification schemes for construction products – Specification* was written after the launch of BES 6001 and sought to establish a consensus across industry about what factors constitute an acceptable responsible sourcing standard. BRE Global contributed to the development of the Standard.

BS 8902 cannot be used as an assessment standard to certify products directly; rather it is a framework enabling sectors or certification bodies to develop their own sector schemes. Certification bodies, therefore, need to develop schemes that interpret the criteria in relation to their sector and set appropriate standards so that they can evaluate a company's or product's performance. As for the forest certification schemes, sector schemes that are compliant with BS8902 may cover different scopes and may be more or less demanding than one another. Until recently no compliant BS8902 schemes had applied to be recognised in BREEAM.

To enable a variety of sector schemes to develop, including those compliant with BS 8902, BREEAM needs to be able to respond to the changing scope of the associated standards; and transparently and objectively compare the performance achieved under schemes developed using different framework structures. For this reason BRE Global is currently (June 2013) undertaking a 'root and branch' review of the treatment of responsible sourcing standards within BREEAM. The outcome of this review will be a fair and balanced set of criteria against which all schemes can be evaluated and compared regardless of the specific nature of the sector covered. BRE Global has chosen to adopt BS 8902 as the basis for these criteria as it provides a consensus on the specifications of a responsible sourcing scheme. Elements of the CPET review structure are also being integrated into the criteria to enable full consideration of both management and performance based standards to be carried out. It is important that the selected criteria are broadly accepted as being fair and representative of the risks and opportunities that exist in differing sectors and so BRE Global will consult with industry as the detailed criteria are developed.

As it will take time to gain this consensus, a set of general criteria has been developed internally by BRE Global in order to integrate BS 8902 compliant schemes into the BREEAM 2011 Tier Table in the short term and are

based on the requirements of both BES6001 and BS8902. They are intended to allow schemes based on the two frameworks to be compared and integrated in BREEAM and are set out in Table 2a and 2b below.

The basic principle is that a scheme which demonstrates compliance to BS 8902 requirements will be recognised within the BREEAM tier table. Those schemes which demonstrate greater levels of transparency and reporting of economic, environmental and social performance, and/or increasing proportions of materials under consideration will move upwards in the table as is the case with BES 6001 and timber certification schemes.

Whilst it is recognised that these interim criteria do not provide a fully consistent set of evaluation criteria for all schemes they do allow BS 8902 compliant schemes to be rapidly included within the BREEAM Tier Table.

Table 2a – Entry criteria for BS 8902 compliant sector schemes

Basic entry criteria to be eligible for assessment in the tier table	Schemes must: • be accredited as compliant to BS 8902 by an appropriate Accreditation Body (e.g. UKAS in the UK) and therefore meet all the requirements of BS 8902. • evaluate material environmental, social and ethical issues (as identified in BS 8902) for all the assessed proportions of the product's constituent materials down the supply chain to those organisation(s) responsible for: a. the extraction and acquisition of raw materials; or b. the recovery of recycled materials; or c. the production of by-products or production residues, or d. the processing of commodity traded materials.

Table 2b – Criteria to determine Tier Table Level placement for BS 8902 compliant sector schemes

BREEAM 2011 Tier Level entry	**General scheme criteria**
To be eligible to be entered into Tier Level 5	As basic entry criteria plus: • Full internal policy compliance with key issues of Quality, Environment and Health and Safety supported by an overarching Responsible Sourcing Policy. • Constituent materials are traceable to the supply chain organisation(s) responsible for: a. the extraction and acquisition of raw materials; or b. the recovery of recycled materials; or c. the production of by-products or production residues, or d. the processing of commodity traded materials. • Policy and metrics are established are agreed at corporate level for key environmental, social and ethical issues as identified in BS 8902.
To be eligible to be entered into Tier Level 4	As Tier Level 5 criteria plus: • A minimum of 60% of constituent materials are from suppliers who have a QMS certified BS EN ISO 9001 (or equivalent) by an accredited organisation. • A minimum of 60% of constituent materials are from suppliers with an EMS certified to BS EN ISO 14001 (or equivalent) by an accredited organisation. • A minimum of 60% of constituent materials are from suppliers with an H&S management system consistent with the principles of OHSAS 18001 (or equivalent). • Objectives and targets for key environmental, social and ethical issues as identified in BS 8902 are set at corporate level. • A basic LCA has been evaluated for the material/product.

To be eligible to be entered into Tier Level 3	As Tier Level 4 criteria plus: • A minimum of 75% of constituent materials are from suppliers who have a QMS certified BS EN ISO 9001 (or equivalent) by an accredited organisation. • A minimum of 75% of constituent materials are from suppliers who have an EMS certified to BS EN ISO 14001 (or equivalent) by an accredited organisation. • A minimum of 75% of all constituent materials are from suppliers who have an H&S certified to OHSAS 18001 (or equivalent) by and accredited organisation. • Performance against key environmental, social and ethical issues objectives and targets is freely available and reported to stakeholders on a site- and product-specific basis. • An advanced LCA has been evaluated for the material/product.
To be eligible to be entered into Tier Level 2	As Tier Level 3 criteria plus: • A minimum of 90% of constituent materials are from suppliers who have a QMS certified BS EN ISO 9001 (or equivalent) by an accredited organisation. • A minimum of 90% of constituent materials are from suppliers who have an EMS certified to BS EN ISO 14001 (or equivalent) by an accredited organisation. • A minimum of 90% of all constituent materials are from suppliers who have an H&S system certified to OHSAS 18001 (or equivalent) by an accredited organisation. • Performance against key environmental, social and ethical issues targets is freely available, reported to stakeholders on a site- and product-specific basis and verified by an independent third-party body. • Advanced LCA evaluated for material/product is freely available to all stakeholders.
To be eligible to be entered into Tier Level 1	As Tier Level 2 criteria plus: • consider a higher proportion of constituent materials for quality, environmental and H&S certification than the 90% for entry into Tier Level 2, and/or • consider additional environmental, social, ethical and economic factors. These could include: a. extended traceability b. extended producer responsibility c. material criticality analysis and reporting d. enhanced requirements for corporate governance and transparency N.B. BRE Global is not aware of any schemes that would achieve tier level 1, but the level has been created to allow for an innovative and aspirational scheme to develop.

Future plans for responsible sourcing in BREEAM and in the general area of responsible procurement.

In conducting the current 'root and branch' review of responsible sourcing standards it has become evident that these general criteria require further amendment to allow full recognition of the variety of schemes and supply chains encompassed under the BS8902 framework. The current review will therefore result in a revised set of evaluation criteria which may affect the relative position of sector specific schemes within the BREEAM Tier Table. It is envisaged that the revised table will be integrated within both new and existing versions of BREEAM once completed.

There is evidence that there are some significant challenges to be addressed if responsible sourcing certification is to continue expanding and the process of specifying and demonstrating performance against these standards is to be made easier. BREEAM needs to take these into account in its evaluation of schemes. These challenges fall into five main areas and are explained in Table 3.

Table 3 – Challenges for the future

Challenge	Background
1. SMEs	Linked with issues 2 & 3: • The nature of responsible sourcing schemes in terms of their evidential requirements and criteria for securing additional credits are very much focused on management modes typically found in larger enterprises. • In order to broaden the reach of responsible sourcing certification a means of reaching out to SMEs needs to be developed.

	• The challenge is to derive some means of certifying SMEs, with different levels and types of evidence, which are as robust as those to which the larger organisation needs to conform.
2. Long Supply Chains	Linked with issues 1 & 3: • Many of the supply chains currently covered by responsible sourcing schemes are for products and materials with relatively short and/or vertically integrated supply chains. • Difficulties with demonstrating responsible sourcing expand as supply chains get longer and more complex. • Longer supply chains often contain large numbers of smaller enterprises. • The challenge will be to seek to introduce responsible sourcing certification from the 'bottom up' rather than 'top down' as is now the case. • Resolving these issues will also support the movement of certification into new and exciting product areas.
3. Complexity	Linked with issues 1 & 2: • It has been noted that there are relatively few BREEAM credits available for responsible sourcing whilst the process of demonstrating compliance is often complex. • Options would be to simplify the process (see 1 and 2 above), simplify the process within Mat 3 of BREEAM and/or increase the number of credits available in BREEAM.
4. Internationalisation	• At the time of writing, responsible sourcing certification in construction (outside of timber certification) is generally only taking place in the UK. • There are activities at European level introducing horizontal standards for social, economic and environmental factors (CEN/TC 350). • References to standards in frameworks and sector schemes are generally to internationally recognised standards (eg EN ISO 9001, EN ISO 14001 and OHSAS 18001) but some schemes are still not perceived to reflect regional or local issues. • The challenge will be to develop schemes that are equally robust but may be 'tuned' for different international regions through possibly some sort of modular approach.
5. Developments	• The responsible sourcing area is developing quickly. • Existing standards need to adapt to keep up with best practice. • Practices which were 'leading edge' can swiftly become norms in such fast moving areas.

BRE Global is currently (June 2013) in the process of developing responses to these five challenges by:

- developing version 3 of the BES6001 framework standard to reflect developments in responsible sourcing;
- considering how to make responsible sourcing certification more accessible to SMEs whilst retaining the robustness of associated schemes;
- considering how to make BES6001 more accessible to companies operating internationally;
- updating the issue within BREEAM to enable more project teams to engage with the issue; and
- undertaking further development of the criteria for the BREEAM tier table – this will be conducted in consultation with industry during June/July 2013 and the outcome will be a single, expanded set of criteria that will be used to set a new baseline for all responsible sourcing schemes including BS8902, BES6001 and the CPET evaluated timber schemes.

Bibliography

BRE Global. (2008). *BES6001: Framework Standard for the Responsible Sourcing of Construction Products.* BRE Global.

BSi. (2009). *BS8902:2009 Responsible sourcing sector certification schemes for construction products. Specification.*

CPET. (2010). *Results of CPET's 2010 review of forest certification schemes*. Retrieved April 19, 2013, from CPET Website: http://www.cpet.org.uk/cpet-news/news%20stories/2011-archive/results-of-cpet2019s-2010-review-of-forest-certification-schemes/

HM Government. (2008, June). *Strategy for Sustainable Construction.* Department for Business, Innovation & Skills. HM Government.

Olympic Delivery Authority. (2007). *Procurement Policy.*