

RESPONSIBLE SOURCING OF CONSTRUCTION PRODUCTS

Framework Standard for the Responsible Sourcing of Construction Products (BES 6001)

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The construction industry is a major consumer of resources and has a large impact on the sustainability of the UK and the wider world. BRE Global has developed a Framework Standard for the Responsible Sourcing of Construction Products (BES 6001) and associated certification scheme to manage and reduce the impacts throughout the supply chain. BES 6001 is intended to provide manufacturers and distributors with a means by which to have construction products independently assessed and certificated as being responsibly sourced. The scheme is recognised by the BRE Environmental Assessment Method (BREEAM) family of certification schemes, which awards credits for construction products certificated as responsibly sourced through approved schemes. This Information Paper provides an overview of the responsible sourcing of construction products and an introduction to the responsible sourcing standard and certification scheme developed by BRE Global.

BACKGROUND

Purchasers of construction products are increasingly concerned about the social and environmental impacts of their purchasing decisions and are expecting their suppliers to seek ways of reducing these impacts throughout the supply chain. There is also a growing trend in ethical investment in sustainable products. All product manufacturers and/or suppliers can demonstrate their social responsibilities by becoming certificated under a responsible sourcing scheme.

Often purchasers want to know:

- where the product and its constituent materials were sourced from



- that no one in the supply chain has been exploited or forced to work in unsatisfactory conditions – eg no child labour or forced labour
- the impact on the environment resulting from the product's manufacture, distribution, use and disposal
- that adequate management systems are in place to measure and continually improve the sustainability of the product.

Product manufacturers want to:

- increase their competitiveness
- improve their market share
- be one of the first organisations to achieve certification under the responsible sourcing scheme
- reach more customers
- improve their corporate reputation.



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Outside of the construction industry, there are well-established responsible sourcing schemes, eg fair-trade food. Previously, the only construction sector that could provide evidence of responsible sourcing was timber, with schemes such as the Forest Stewardship Council (FSC). No other construction product sector could be assessed and certificated as being responsibly sourced.

Clients for major construction projects, such as the Olympic Delivery Authority, are requiring that construction materials are responsibly sourced wherever possible^[1]. Environmental impact assessment schemes such as BREEAM and the Code for Sustainable Homes also encourage and award credits for responsibly sourced construction products.

BRE Global's framework standard (BES 6001) and associated certification scheme offers independent third-party verification to manufacturers and distributors that their construction products have been responsibly sourced. BRE Global currently operates the only third-party certification scheme in the world that all industry sectors within the construction industry can become certificated to. The first BES 6001 certificate was issued to Aggregate Industries UK Ltd in March 2009 for its Newbold Quarry site. In August 2009, Aggregate Industries achieved companywide certification and Wienerberger Ltd was issued a certificate for its Warnham Works. A number of organisations are currently undergoing certification to BES 6001.

Third-party confirmation that materials are responsibly sourced provides a means to:

- achieve a higher number of credits for responsible sourcing within environmental assessment methodologies such as the BREEAM family of certification schemes
- compare the sustainability of different types of certificated construction products across the whole industry sector
- improve a company's corporate image by providing independent verification that the company has a robust responsible sourcing plan in place
- score construction products against different levels of achievement to promote continuous improvement and to drive competition and innovation
- increase customer trust and confidence that a company's sustainability claims are accurate and not just 'greenwash'
- minimise environmental liability issues by managing environmental impact through quality systems.

SUSTAINABLE DEVELOPMENT, POLICIES AND REGULATION

One of the core elements of responsible sourcing is 'sustainable development'. The term has been commonly used since it was defined during the 1987 UN World Commission on Environment and Development as 'development which meets the needs of the present without compromising the ability of future generations to meet their own needs'^[2]. The UK government has identified four main themes of sustainable development in a strategy, 'A better quality of life, a strategy for sustainable development in the UK'^[3]. These are:

- social progress that recognises the needs of everyone

- effective protection of the environment
- prudent use of natural resources
- maintenance of a high and stable level of economic growth and employment.

Responsible sourcing and the work that BRE has done in this area is referred to in the UK government's 'Strategy for sustainable construction'^[4].

DEVELOPMENT OF BES 6001

The development process for BES 6001 incorporated extensive industry consultation, including three consultation workshops with the Construction Products Association, two open website consultations and review and approval by BRE Global's Sustainability Board and governing body. The group that drafted the standard took into account comments from all sectors and made changes to BES 6001 where appropriate. The standard was developed so that it would be applicable to any construction product or sector – this meant including generic requirements so that any product may be assessed against it. However, it was also recognised that it would be beneficial for some sectors to create their own sector-specific requirements. It was therefore decided to develop BES 6001 as a framework standard against which individual sectors could develop their own standards to suit their particular needs. For example, the reinforcing steel industry launched its sector scheme, Eco-Reinforcement, to comply with BES 6001. Adherence to BES 6001 requirements may also be used as evidence of compliance with the requirements of environmental assessment schemes such as BREEAM. The British Standards Institution is currently developing a draft standard, BS 8902^[5], based on the work conducted on the BRE Global standard.

The type and level of assessment to BES 6001 is dependent on the requested scope of the certification. Different pathways of assessment include:

- assessing the whole company and its complete range of products
- assessing specific products or product ranges manufactured at specific site(s).

The overall level of performance (expressed as the overall assessment score; see 'BES 6001 scoring' below) sought by the applicant against the requirements of the standard will determine the extent of assessment needed.

CONTENT OF BES 6001

BES 6001 is intended to help the industry meet government sustainability targets by:

- promoting responsible sourcing of construction products through the provision of a set of requirements against which products may be assessed
- giving clear guidance to the industry on the sustainability aspects that should be addressed.

The scheme aims to provide independent verification that construction materials and products are being responsibly sourced. It is structured so that different levels of compliance can be demonstrated through a combination of approaches, which are discussed below.

This can include giving credit for compliance with other recognised certification schemes, such as FSC, that have requirements consistent with those of BES 6001.

Specific areas of assessment for BES 6001 include:

1. Organisational management – checking that the organisation is following work practices that it has committed to under this scheme, eg environmental, quality, health and safety management.
2. Supply chain management – material traceability and health and safety management systems throughout the supply chain.
3. Environment – management of various impacts upon the environment, eg greenhouse gas emissions, water use, transport impacts.
4. Social requirements – development of employment skills and liaison with the community. For example, structured training of staff through the Investors in People award could be one way of providing evidence of this requirement. Liaising with the community could also be achieved in many ways, such as a questionnaire issued to the local community asking for feedback on any areas of concern to the community resulting from site operations.

BES 6001 provides scope for different levels of compliance. These include, in increasing level of achievement:

1. Establishing written policies and metrics. The organisation being assessed should have a written policy approved by the organisation's senior management to address the requirements of the standard. The policy should be compatible with current industry practice and the organisation should establish appropriate metrics for measuring its performance according to the policy. Written policies and metrics are required throughout the standard to ensure that the organisation has communicated its objectives across the whole of its business.
2. Setting binding objectives and targets. The organisation should have objectives and targets approved by the organisation's management for the requirements set in specific clauses of the standard. Organisations should consult with stakeholders, including supply chain organisations, in setting these objectives and targets. The organisation should also review its performance against industry benchmarks at appropriate intervals.
3. Reporting progress to stakeholders. The organisation should consult and report to its stakeholders on its performance against the requirements set out in the standard. The report should be made freely and publicly available so that the information in it, eg reporting of greenhouse gas emissions, can be compared on a year-to-year basis.
4. Providing independent verification. The organisation should provide data required in specific clauses of the standard and information that it communicates to stakeholders. These data are verified by a third party.

REQUIREMENTS FOR THE RESPONSIBLE SOURCING OF CONSTRUCTION PRODUCTS

BES 6001 details the requirements that organisations, or those in their supply chain, need to meet to ensure their products are responsibly sourced. These are assessed according to a framework of generic compulsory requirements applicable to all industry sectors and to voluntary requirements that are dependent on the specific organisation assessed. Examples of voluntary requirements include:

- Waste management – the establishment of policies and metrics for the diversion of waste from landfill or incineration without energy recovery.
- Water use – the creation of policies and metrics for the reduction of water extraction.
- Resource use – the establishment of policies and metrics for use of primary materials.
- Life Cycle Assessment (LCA) – declarations for assessed products based on the environmental impact of their use or replacement.
- Transport impacts – policies and metrics for reducing the adverse social and environmental impacts of transport associated with the delivery of responsibly sourced product to customers.
- Employment and skills – policies and metrics for the training and development of employees.
- Local communities – policies and metrics to identify and consult with local community stakeholders affected by extraction and acquisition of raw materials and/or energy and material production and/or manufacture of construction products. This requirement is applicable in any part of the world.

Box 1: Definitions from BES 6001

- **Sustainable resource.** In the context of BES 6001, this does not mean that a resource is infinite but that the management of the resource has been conducted in the most sustainable manner possible.
- **Corporate social responsibility.** A form of corporate self-regulation integrated into a business model to monitor and ensure adherence to law, ethical standards and internal policies.
- **Supply chain.** A system of individuals, organisations and resources involved in developing a product.
- **Quality management.** A method for ensuring that the activities necessary to design, develop and implement a product or service are effective, efficient and consistent with respect to the system and its performance.
- **Framework standard.** A generic outline for a common set of principles.
- **Stakeholders.** Individuals, groups and/or organisations who affect and/or could be affected by an organisation's activities, products or services and associated performance.
- **Environmental management system.** A framework for managing environmental responsibilities in a way that is integrated into the overall organisational operations.
- **Constituent material.** A single material that makes up a composite material or product.
- **Primary material.** Virgin material used in its raw form.

Table 1: Performance ratings (BES 6001 issue 2)**Section 3.2 Organisational management requirements**

Section	Requirement	Element				Performance rating
		(a)	(b)	(c)	(d)	
3.2.1	Responsible sourcing policy	(Compulsory) 0				Performance rating
3.2.2	Legal compliance	(Compulsory) 0				
3.2.3	Quality management system	(Compulsory) 0	1			
3.2.4	Supplier management system	(Compulsory) 0				

Section 3.3 Supply chain management requirements

Section	Requirement	Element				Performance rating
		(a)	(b)	(c)	(d)	
3.3.1	Material traceability through the supply chain	(Compulsory) 0	1	2		Performance rating
3.3.2	Environmental management systems in the supply chain	(Compulsory) 0	1	2	3	
3.3.3	Health and safety management systems in the supply chain	(Compulsory) 0	1	2	3	

Section 3.4 Environmental and social requirements

Section	Requirement	Element				Performance rating
		(a)	(b)	(c)	(d)	
3.4.2	Greenhouse gas emissions	(Compulsory) 1	3	5	7	Performance rating
3.4.3	Resource use	(Compulsory) 1	3	5	7	
3.4.4	Waste management	1	2	3	4	
3.4.5	Water extraction	1	2	3	4	
3.4.6	Life Cycle Assessment (LCA)	2	4	5		
3.4.7	Transport impacts	1	2	3	4	
3.4.8	Employment and skills	1	2	3	4	
3.4.9	Local communities	1	2	3	4	

It is anticipated that individual organisations will identify additional requirements that will need to be met in order for their products to be independently assessed as being responsibly sourced.

BES 6001 SCORING

BES 6001 recognises that different organisations will be able to achieve different levels of compliance with each of the clauses within the standard. BES 6001 therefore has different levels of scoring, or 'performance rating', which reflect increasing levels of compliance. The certification scheme is implemented with yearly manufacturing site assessments.

In general, higher performance ratings are awarded according to the following sequence of achievement:

- Commitment – establishing a policy and metrics for a particular aspect of responsible sourcing.
- Compliance – setting targets and objectives based on this policy and reviewing performance against them.
- Publicising – publicising and verifying progress against such targets.

The performance ratings for each of the sections of BES 6001 are given in Table 1 (the clauses in the standard before section 3.2 include the scope, definitions and general requirements). For example, an applicant establishing a policy and metrics for waste management (section 3.4.4 (a)) would achieve a performance rating of 1, setting objectives and targets based on this policy (3.4.4 (b)) would achieve a

Table 2: Threshold scores required to achieve an overall assessment score in BES 6001

Total score in section	Overall assessment score			
	Excellent ****	Very good ***	Good **	Pass *
3.2 and 3.3	8	5	3	Meet compulsory requirements
3.4	36	26	16	7

performance rating of 2, reporting to stakeholders on progress against these targets (3.4.4 (c)) would achieve a performance rating of 3 and procuring independent verification of the information and data reported to stakeholders (3.4.4 (d)) would achieve a performance rating of 4. The scoring system therefore encourages companies to strive to achieve higher performance ratings. Not all clauses of the standard have four elements, however, because some clauses can be broken down into more levels of compliance than others.

The performance ratings achieved against each of the requirements of BES 6001 are then used to generate an overall assessment score defined as 'pass', 'good', 'very good' or 'excellent'. This is determined from:

1. the sum of the performance ratings achieved against the requirements of sections 3.2 (organisational management) and 3.3 (supply chain management) of BES 6001, and
2. the sum of the performance ratings achieved in section 3.4 (environmental and social requirements) of BES 6001.

The results from 1 and 2 above are then compared with thresholds given in BES 6001 for achieving a 'pass', 'good', 'very good' or 'excellent' score (Table 2).

The overall assessment score is determined according to the lowest of the two ratings achieved. For example, if an organisation achieves a 'very good' rating for sections 3.2 and 3.3 but achieves only a 'good' rating in section 3.4, then it will receive an overall assessment score of 'good'.

The compulsory elements are all weighted with zero points apart from the clauses that relate to greenhouse gas emissions and resource use. These two elements were given a rating of 1 to emphasise their importance in terms of sustainability and the difficulty of industry sectors in achieving the minimum requirement.

CERTIFICATION FEES

The certification fees for BES 6001 are determined according to individual applications to join the scheme. Further information is given in fee sheet FS047^[6].

CONCLUSION

BES 6001 and the associated certification scheme offers a pathway for members of the construction industry to provide evidence that they have responsibly sourced their product(s) and means that responsible sourcing can be compared across industry sectors. Responsible sourcing could change the way the construction industry thinks and operates today, creating a more sustainable industry for future generations.

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