

Commodity Group

Reinforcement

This commodity group covers steel reinforcement used to deliver tensile strength to concrete.

What are the risks/issues associated with this commodity group

Reinforcing steel is a significant part of any major construction project. The supply chain for reinforcing steel, its production, distribution, processing and delivery to a construction site, is complex.

Over 60% (61.3% 2012) of steel reinforcement is manufactured in the UK and all imports in 2012 were sourced from European countries, predominantly from Spain, Latvia and the UK. By the end of 2014 this situation was seen to have changed dramatically with over 50% being imported from China & Turkey (Iron & Steel Statistics Bureau, 2014).

As such the social and ethical risks associated with the manufacture of steel reinforcement are considered to be relatively low, especially given the existence of two well-established responsible sourcing schemes (see below).

Because of its large volume the responsible procurement of reinforcement also has a significant implication on BREEAM credit MAT5 i.e. a failure to demonstrate that concrete is responsibly sourced could negatively impact on the BREEAM credit.

Trade Associations

The British Association of Reinforcement (BAR)

Certified schemes covering Responsible procurement

1. **Eco-Reinforcement** is a third-party certification scheme developed by the reinforcing steel industry to comply with BRE BES 6001:2008 – Framework Standard for the Responsible Sourcing of Construction Products. Eco-Reinforcement provides a means for construction clients, specifiers and contractors to purchase reinforcing steel from a supply chain which is pro-actively addressing issues of sustainability. The Eco-Reinforcement scheme assesses against a number of different organisational, supply chain, environmental and social criteria; with some defined as compulsory and others voluntary or ‘tradeable’. Certificates are awarded on a ‘Pass’, ‘Good’, ‘Very Good’ and ‘Excellent’ scale, based on the number of points awarded for different performance levels. All Eco-Reinforcement companies are required to print information such as transport-related CO2 emissions from scrap-yard to site on their delivery notes. The scheme intends to develop further and provide more extensive environmental impact information. All companies supplying Eco-Reinforcement will be certified to BS EN ISO 14001 and will operate an auditable H&S management system. All Eco-Reinforcement is manufactured through the EAF process, from recycled scrap metal. For more information see www.eco-reinforcement.org.

Until recently only members of the Celsa Group held Eco-Reinforcement certification (Celsa Steel (UK) Ltd, BRC Ltd, Express Reinforcements Ltd and ROM Group Ltd). However in December 2012 Hy-Ten Ltd achieved certification and the Spanish manufacturer Megasa will also shortly achieve the same.

2. CARES is an independent, not-for-profit product certification body, which provides confidence to the users, purchasers and specifiers of constructional steels through a regime of regulation, testing and inspection. It operates for the benefit of the construction industry offering certification schemes for companies that produce materials, components or offer services, primarily to the reinforced concrete industry. Clients can specify CARES approved companies and products with confidence that they will comply with the relevant product or system standards and without the need for verification testing by the purchaser or contractor.

CARES has developed **The CARES Sustainable Reinforcing Steel** certification scheme that quantifies the environmental impact of the reinforcing steel supply chain. CARES has worked with important stakeholders with a view to providing a stern test of compliance as well as a level playing field for demonstrating the sustainability of reinforcing steel and other steel

construction products. The CARES scheme takes into account specific environmental and social impacts and provides recognition for reinforcing steel producers and processors embracing genuine sustainability. The CARES scheme has been established to comply with BS 8902, which provides a framework for the management, development, content and operation of sector certification schemes for responsible sourcing and supply of construction products. It will enable the CARES approved reinforcing steel supply chain to demonstrate the responsible sourcing of construction products and its commitment to sustainable development. This scheme meets a number of private and public sector sustainability initiatives and may only be awarded to firms which already hold a valid CARES Certificate of Approval. For more information see www.ukcares.com.

The CARES Sustainability Scheme has been assessed, by BRE Global, against the requirements for responsible sourcing credits within BREEAM New Construction 2011 and has achieved entry into Tier 4 of Table 10-2 in the Mat 03 issue [Responsible sourcing of materials].

This may encourage its wider acceptance by clients and contractors. The current rating is being contested by CARES, which although not cradle-to-grave has a more robust approach to wider ethical sourcing issues. CARES also believes that assessment criteria have not been applied consistently [current as of 31st November 2013].

Investigations into Supply Chain

ESCIC have investigated both responsible sourcing schemes and endorse both, although encourage contractors to undertake their own due diligence and appraisal of the rigour and robustness of each.

Proposed Actions for mitigation

Crossrail recommends that contractors should specify and source steel reinforcement certified to either the Eco-Reinforcement standard or the CARES Sustainable Reinforcing Steel scheme. Contractors may choose to evaluate each scheme individually and then specify one or other or both based on their own due diligence.

Result of Mitigation

To date contractors working on Crossrail have reported 100% compliance with sourcing steel reinforcement certified to either the Eco-Reinforcement standard or the CARES Sustainable Reinforcing Steel scheme.

Neither scheme provides categorical evidence of full compliance with ETI principles.

There are high levels of certification to BES 6001 in the industry, and there is a great degree of awareness of the standard. BRE appear committed to the continual improvement of the accreditation (for example in an industry-wide consultation on what the next revision should consist, in early 2013).

Note that accreditation is “product specific” and per production facility (or multiple sites), so a procurer need to ensure that the correct and relevant certification is provided.

The GreenBookLive website can be used to ascertain supplier compliance to BES 6001 and to view the level attained:

http://www.greenbooklive.com/search/companysearch.jsp?from=20&partid=10021§ionid=0&companyName=&productName=&productType=&certNo=®ionId=0&countryId=0&addressPostcode=&id=153&results_pp=10&sortResultsComp=

Residual Supply chain risks

Certification to BES6001 under schemes such as Eco-reinforcement do not fully cover issues relating to Ethical Sourcing and only require a Policy statement for Pass level. In that regard, CARES offers a more comprehensive coverage of these issues although not covering cradle to grave environmental impacts.