



## BRC Sustainability Statement 2017



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## 1.0 Company Information

Founded in 1908, BRC is the UK's largest supplier of steel reinforcement and associated products for concrete. With a network of strategically placed manufacturing locations, we are able to meet a vast range of requirements for project of all sizes and demands. Wholly owned by Celsa Steel Services UK, BRC has an enviable supply chain, being able to offer consistency of product and full traceability, with all steel traceable from Celsa's steel works and rolling mill in Cardiff, through our manufacturing facilities and delivery to site.

All the steel reinforcement supplied by BRC, is sourced from within the UK and has a recycled content of at least 98% (see section 4.0). All steel reinforcement manufactured by BRC complies with the highest quality and sustainability standards and can be found in iconic projects such as the second Severn Crossing, the Principality Stadium, Wembley Stadium, Merseylink Gateway, CrossRail, Falkirk Wheel and Aberdeen Western Peripheral Route.

BRC Reinforcement Ltd are committed to sustainable activities wherever possible, a significant part of which is transparency with respect to all actions which may impact people or the surrounding environment. This statement has been compiled to report to stakeholders on such actions, informing them of our sustainability performance and efforts to continually improve in areas such as health and safety, production and manufacturing activities, raw materials usage, greenhouse gas emissions, waste and recycling performance, transport activities, employment skills and local community impacts. Data is reported in units per tonne of finished steel product on a site by site basis in addition to a company total, with yearly comparisons displayed wherever possible.

### 1.1 Map of Sites



## 1.2 Policies

In order to operate in the most sustainable fashion possible, BRC has a suite of policies which are regularly updated to reflect the ongoing activities of the company. We ensure these policies are achievable by issuing accompanying procedures, outlining operational changes and actions which aimed at achieving any goals, targets and objectives set. The following topics are addressed within the company's Responsible Sourcing Manual, available from the company website or by request:

- Responsible sourcing
- Legal compliance
- Quality assurance
- Supply chain and purchasing
- Environmental management
- Greenhouse Gas Emissions
- Health and safety
- Resource usage
- Waste and recycling
- Transport
- Employment and skills
- Local communities

## 2.0 Health and Safety Information

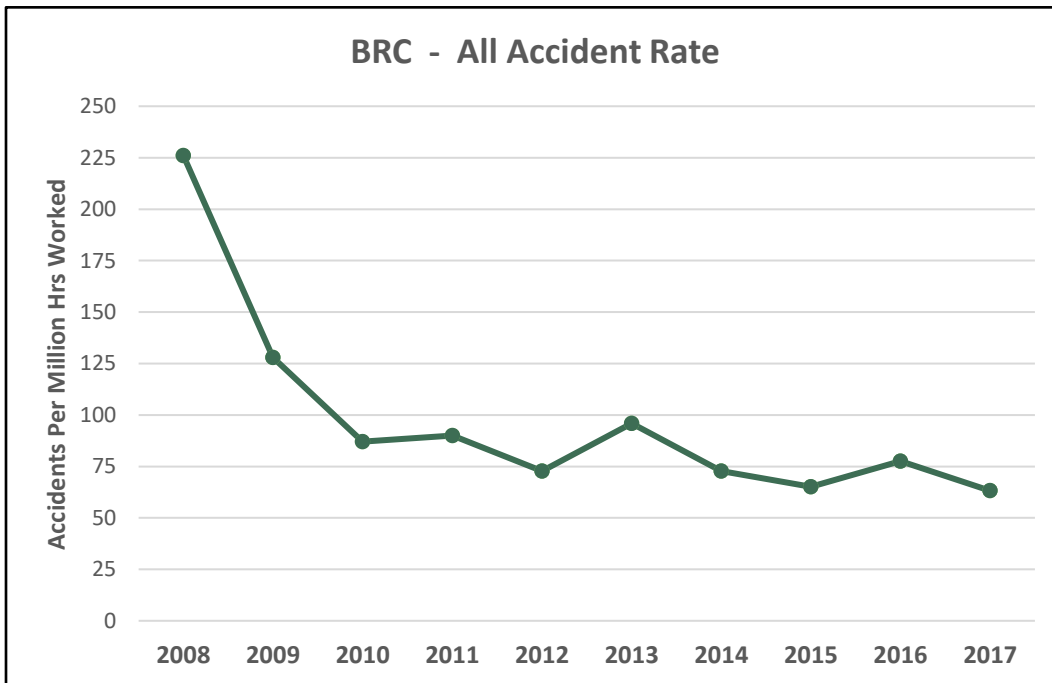
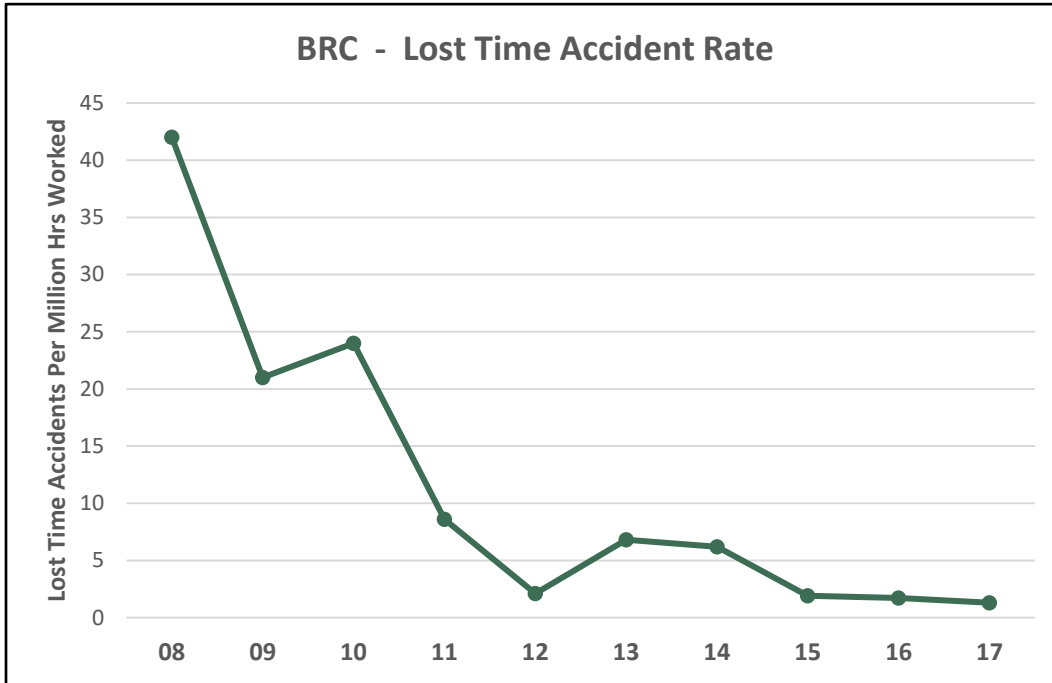
All BRC manufacturing sites operate a safety management system that complies with the requirements of BS OHSAS 18001. All sites are third-party approved to this standard, with copies of certificates available on the BRC and UK CARES websites.

In addition to the third-party audits required for BS OHSAS 18001 accreditation, all BRC sites are subject to regular internal audits and health and safety management reviews to ensure we are doing the most we can at all times to protect the wellbeing of all individuals.

BRC Actively engages with other bodies such as BAR (British Association for Reinforcement) and MPA (Mineral Products Associations) with the goal of improving health and safety standards. Further actions taken include benchmarking visits to other companies, both inside and outside the reinforcement steel industry, which allows us to continue to strive towards our goal: reducing accidents to zero.

BRC was instrumental in helping to win the MPA Health and Safety Award for the outstanding achievement in the area of worker involvement through its contribution to an online discussion forum aimed at engaging directly with employees on the subject of health and safety.

The graph below shows that recent efforts in improving health and safety practices at BRC have resulted in a significant reduction in all accidents, including lost time accidents, over the last nine years.



### 3.0 Environmental Initiatives, Accreditations and Compliance

BRC's environmental data and performance is closely monitored, both internally by the environmental team (see sections 5.0 – 8.0) and externally through the auditing and data submission procedures for the various environmental accreditations and schemes which we are a part of. Some of these widely recognised accreditations include:

- ISO 14001, an international standard aimed at helping organizations minimize how their operations negatively affect the environment. CARES (UK Certification Authority for Reinforcing Steel) ensures compliance for ISO 14001 through periodic audits, with all BRC sites now having achieved compliance with the new ISO 14001:2015 standard (certificates available from the BRC website or [www.greenbooklive.com](http://www.greenbooklive.com))
- Carbon Reduction Commitment (CRC) Energy Efficiency Scheme, a UK Government-led scheme aimed at incentivising energy efficiency and reducing emissions. Energy usage statistics are supplied to the Environment Agency by Celsa Manufacturing UK on behalf of BRC.
- Building Research Establishment (BRE) BES 6001 framework, a standard which focuses on enduring the constituent materials of construction products are responsibly sourced.

BRC also complies with several industry-specific standards and schemes, such as:

- Eco Reinforcement, which assesses and recognises responsible sourcing in reinforcing steel products utilising the BES 6001 framework. BRC achieved a commendable 'Very Good' rating from its last company audit.
- British Association of Reinforcement (BAR), which collects environmental data annually from companies across the sector in order to monitor and benchmark the environmental performance of the reinforcement steel industry as a whole.

A further initiative currently being carried out by BRC is the creation of Environmental Product Declarations (EPDs) for our entire product range. This independently verified Type III Environmental Declaration comprehensively documents all environmental impacts associated with the sourcing, processing, transportation and manufacturing of materials for our products across several different sustainability indicators. This allows us to understand more about the life cycle analysis of the products we manufacture. This project is due to be completed in 2018 and will represent a big step forward in understanding the sustainability of the company as a whole and therefore highlighting areas of potential improvement to focus on in the future. The EPD report and certification will be available on our website when complete.



## 4.0 Product Sustainability

The primary purpose of this sustainability statement is to focus on the activities of BRC, however the most significant impacts is incurred during the production of our steel, which this section will highlight.

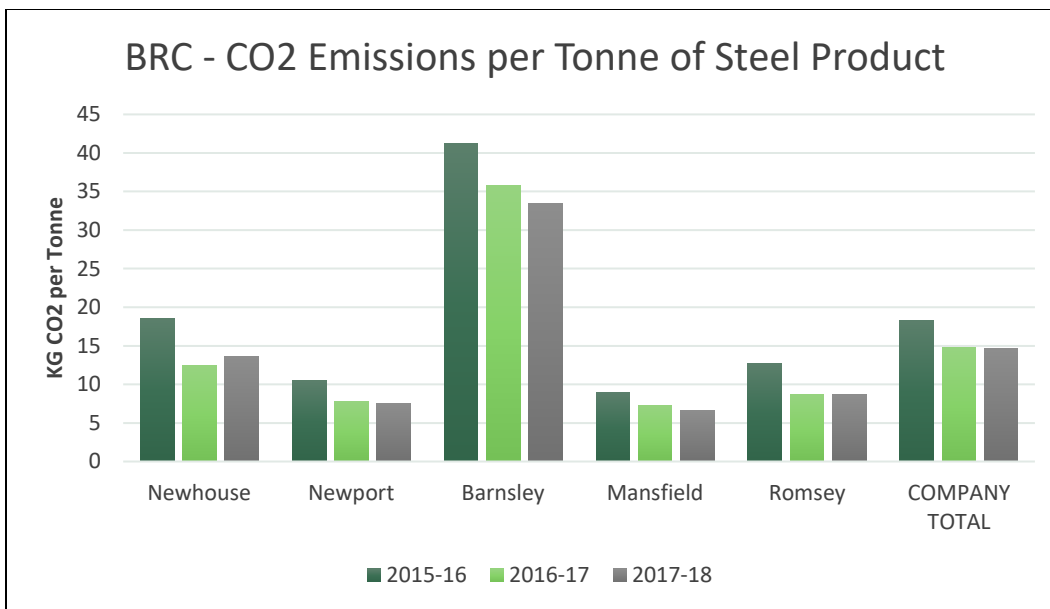
All of the steel used to manufacture BRC's products is supplied by the Celsa Steel Melt Shop in Cardiff. All of this steel is produced from recycled scrap steel via the electric arc furnace (EAF) process. Steel production using the EAF method consumes only a third of the embodied energy, emits one sixth of the CO<sub>2</sub> and produces approximately half the amount of co-products (waste) compared with the traditional blast furnace steelmaking process. Despite this steel production method being the most sustainable available, significant emissions of CO<sub>2</sub> are inevitable due to the combustion of natural gas, coke and carbon, whilst natural gas consumption also results in the release of SO<sub>x</sub>, NO<sub>x</sub> and CO. Further details on the production process of our steel can be found within Celsa Manufacturing UK's annual Eco-Management and Audit Scheme (EMAS) reports (available at [www.celsauk.com/Downloads.mvc/Sustainability](http://www.celsauk.com/Downloads.mvc/Sustainability)).

The steel provided to BRC by Celsa consists of 98% locally sourced scrap metal and 2% ferro-alloys and minerals added to the production process to remove impurities from the steel and to ensure the finished product has the correct properties. During the production process impurities are removed through the furnace slag, a steel by-product that is recycled as an aggregate for the construction industry. All other by-products of production are recycled, ranging from mill-scale – used as an iron-bearing source in the cement industry – to flue dust, from which zinc and other metals are recovered.

While the majority of the environmental impacts associated with BRC's products come from steel production, there are further impacts sustained during the product manufacturing process, which are outlined in the following sections.

## 5.0 Greenhouse Gas Emissions

BRC are committed to reducing greenhouse gas emissions associated with its processes to a level as low as is practically possible. The first step reducing greenhouse gas emissions is recording these emissions as accurately as possible. The graph below shows CO<sub>2</sub> emissions calculated from electricity, natural gas and diesel consumption records over the last three years. The data is reported in annual cycles of April to March (for example 2015-16 refers to the twelve months from April 2015 to March 2016). In terms of indirect emissions reduction, BRC has reduced its CO<sub>2</sub> emissions per tonne of finished steel product by 19.84% since the 2015-16 reporting period. This was largely achieved through increased efficiencies, introducing more efficient LED lightbulbs across our sites and through improved education of staff.

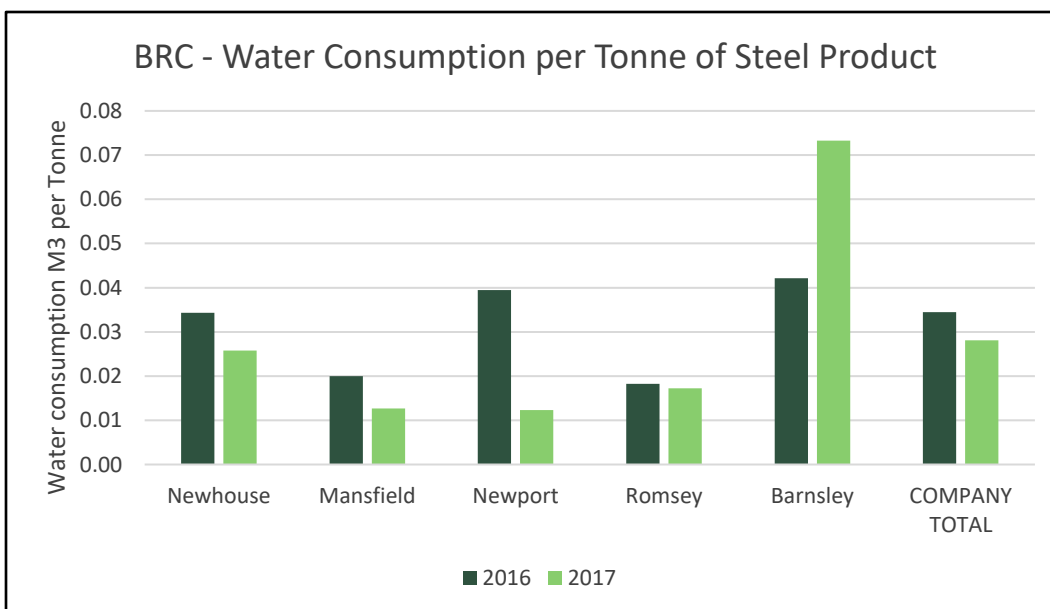


At the time of writing, BRC are currently unable to report non-CO<sub>2</sub> greenhouse gas emissions which arise from company operations. We intend to publish such data in the near future, whilst the EPD project (see section 3.0) will analyse and report this data in significant detail.

BRC has not achieved any direct emissions removals as the only direct emissions are transport-related through our third-party hauliers – however, sustainable transport is of significant important to the company (please see section 8.0).

## 6.0 Water Usage

BRC pursues efficiency in the management of water by closely monitoring water usage at each site, influencing its usage as well as ensuring all staff are aware of the issues surrounding water management. Regular checks are performed to ensure any leaks are repaired as quickly as possible to minimise the



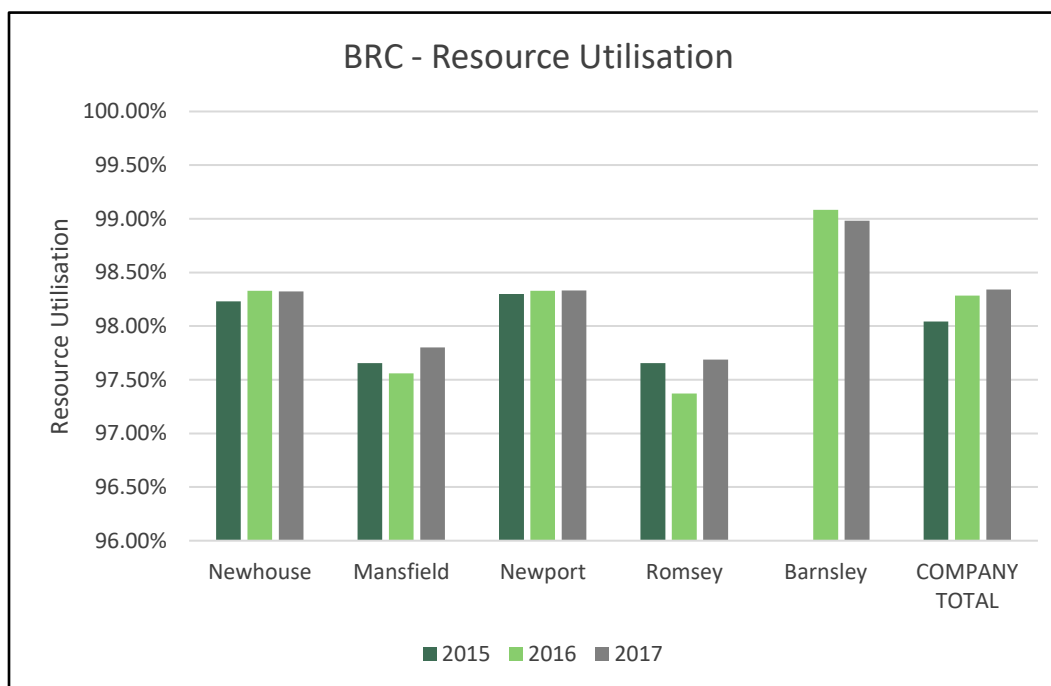


amount of water used. The graph below shows BRC water consumption has been successfully reduced overall. Large annual fluctuations may be explained in part by long periods between meter readings.

## 7.0 Waste and Recycling

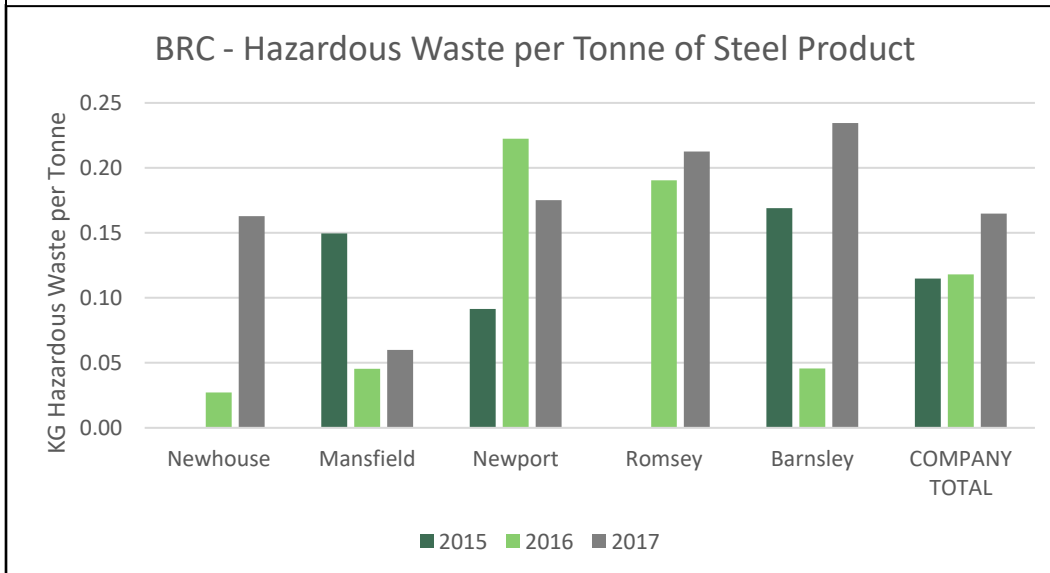
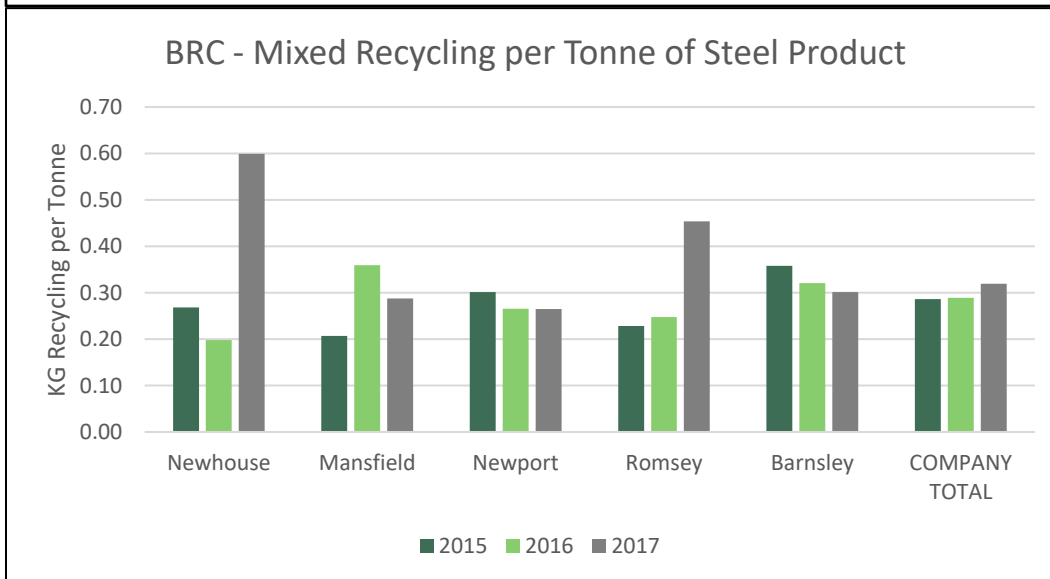
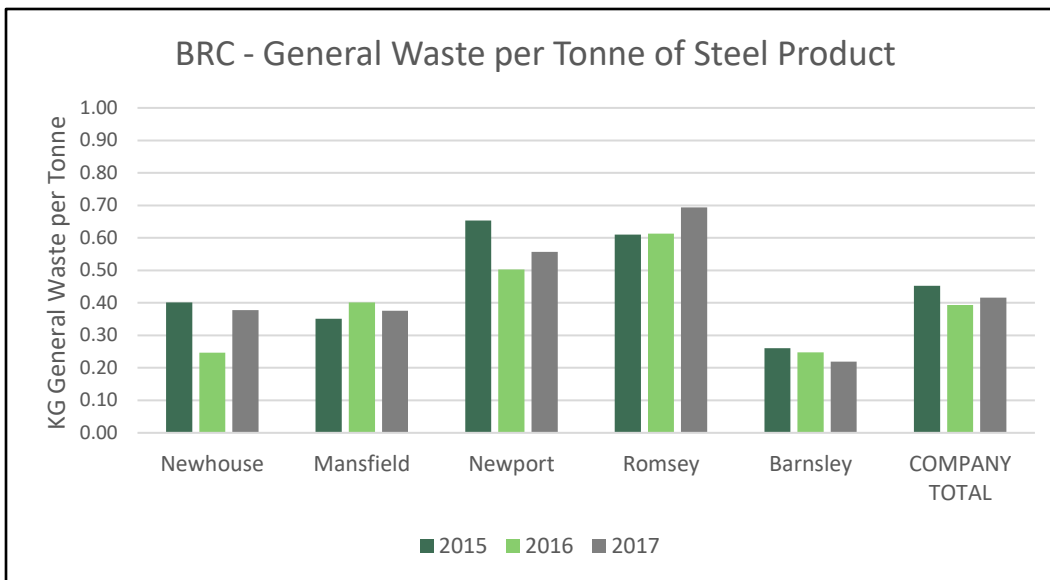
A further significant environmental impact of BRC’s operations is the level of waste produced at our sites and how this waste is dealt with. BRC’s waste management strategy sets out guidelines to ensure waste is dealt with according to the principles of the waste hierarchy, including initiatives aimed at reducing waste creation and ensuring waste is segregated appropriately.

The majority of waste produced at BRC sites is scrap metal which is recycled locally. It is our aim to minimise the level of metal scrap produced by ensuring our resource utilisation rates are as high as possible (shown in the graph below – data collection issue with BRC Barnsley 2015), over this period resource utilisation rates have increased by 0.30% - this small saving equated to utilising an extra 707 tonnes of steel in 2017. All of our products are 100% recyclable at end of life.



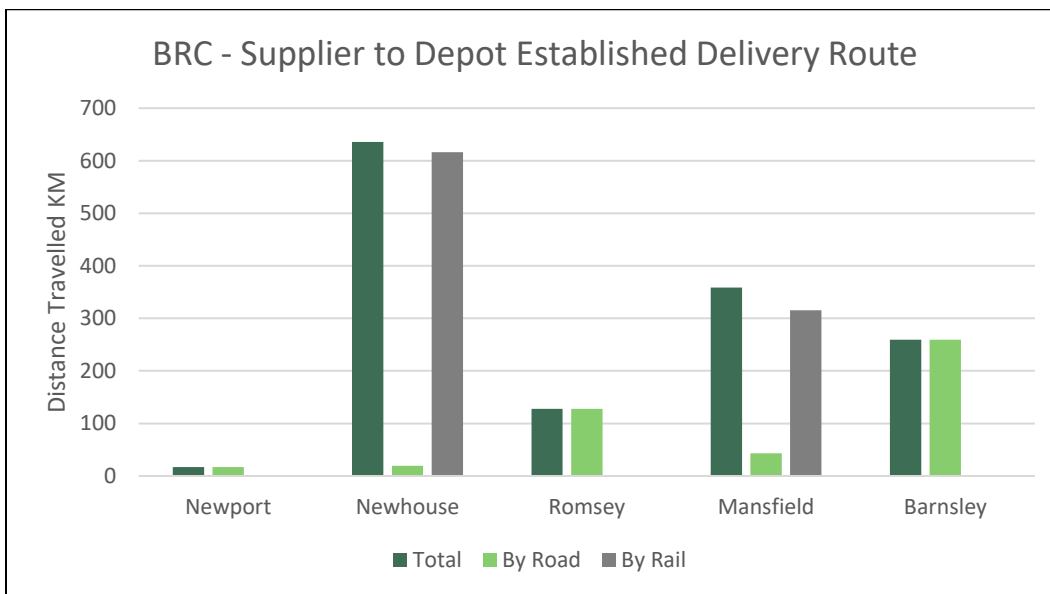
The remainder of BRC’s waste is segregated on-site and, where re-use is not practicable, removed from site by a waste management contractor. All waste streams are closely monitored to keep track of our waste management performance (see graphs below – data collection issue with 2015 hazardous waste at some sites). This monitoring procedure has changed in the last year which, alongside a TQM initiative, is largely responsible for the increase in some waste streams in 2017. In order to tackle this we plan to improve waste segregation and to improve staff education on waste minimisation as per with the latest waste management strategy. Currently, any non-hazardous which cannot be recycled is used for producing refuse-derived fuel, therefore none of this waste goes to landfill. BRC complies with the various legislation regarding waste, for such items as electrical and electronic equipment, batteries, etc. Our

commitment to ensuring our packaging waste is also dealt with sustainably is fulfilled through our membership of the Valpak compliance scheme.

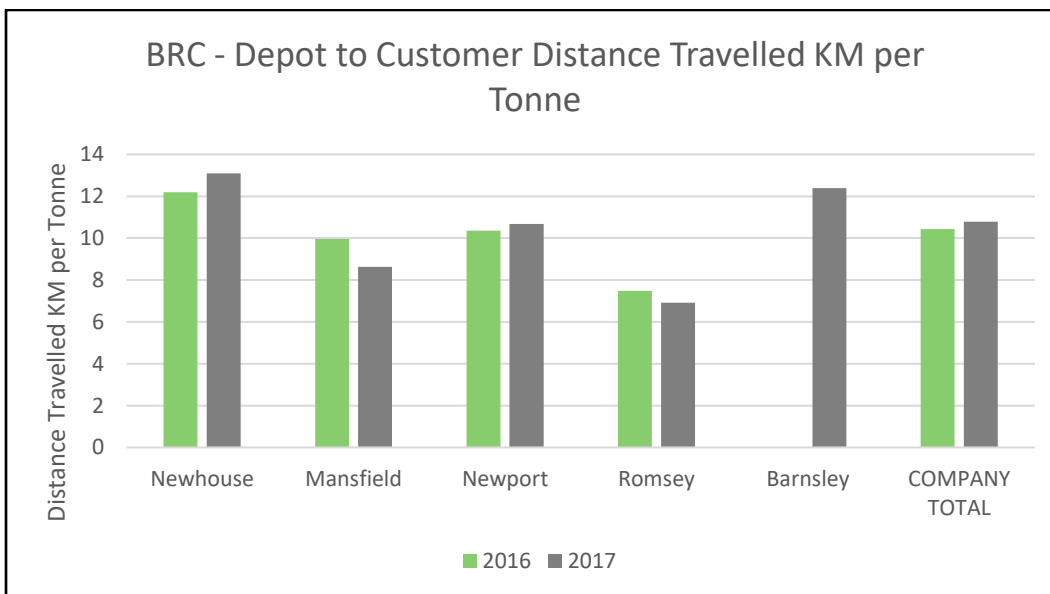


## 8.0 Transport

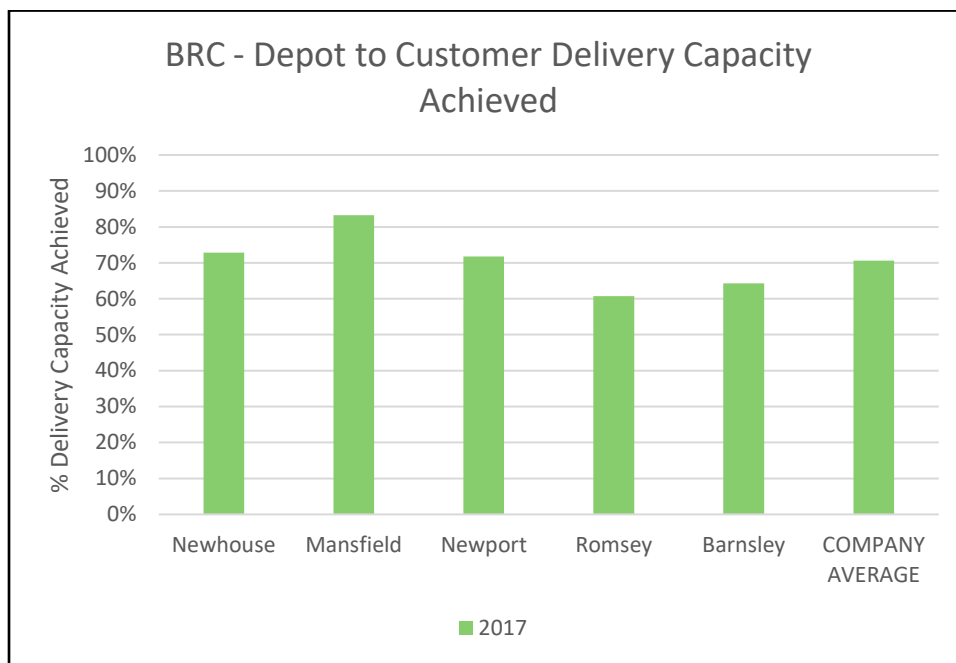
Steel is transported from the Celsa Steel Melt Shop in Cardiff to BRC depots via the most efficient and practical established supply routes through a combination of road and rail deliveries (see graph below). We endeavour for each delivery to contain the maximum amount of steel as is practicable and safe in order to maximise sustainability.



In partnership with its hauliers, BRC are committed to reducing the adverse environmental impacts of transport associated with the delivery of reinforcing steel to customers wherever possible. We operate on a national basis and where practicable deliver to customers from the nearest manufacturing site. The graph below shows a slight overall increase in the distance travelled per tonne of finished steel product delivered to customers (data collection issue for BRC Barnsley 2016).



A further way we aim to reduce the environmental impact of transportation is through maximising the load per vehicle on deliveries to customers. Whilst recognising that for cut and bent reinforcement it is not possible to use the full capacity of a vehicle and still safely load and off-load the product, the company aims to achieve an average of 80% of the capacity of the delivery vehicle. The graph below shows that that in 2017 we fell short of this target at all but one site.



## 10.0 Employee Skills and Training

BRC acknowledge that training at all levels can lead to better performance by individuals which will benefit both the Company and the employee. The employees benefit from greater exposure to new skills and experiences leading to better performance allowing advancement to more senior positions; and the company benefits through increased efficiency and better levels of performance.

All staff undergo a formal induction into the company that includes an overview of sustainability efforts including waste management, energy and water efficiency, and responsible sourcing scheme. Managerial and supervisory staff receive an annual professional development review with intermediate reviews throughout the year. In an improvement on previous years, 100% of operational staff now have an annual assessment giving an opportunity to discuss their specific duties, opportunities for future learning and continuing professional development.

## 9.0 Local Community

We are living in a world that is becoming ever increasingly aware of its impact on all aspects of the environment, and BRC is no exception to this. The need to address sustainability issues at a community level is vital not only for our own interests, but also customers and other stakeholders who are demanding that we manage our impacts on the environment and society as a whole.

BRC aims to interact with all stakeholders to ensure our positive impact on the local community and environment are enhanced wherever possible, whilst our negative impacts are eliminated or reduced as much as possible. The first step is to define who the stakeholders are when we consider our interaction with the local community, the diagram below aims to answer this question. Once we have identified the relevant stakeholders there must be a defined set of actions designed to improve on the impact we have on the local community.

In recent years BRC has received only one complaint from the local community. This complaint was received from Ashfield District Council in October 2016 in relation to noise levels at the BRC Mansfield depot. This was resolved through undertaking acoustic assessments on site and subsequent installation of a number of mitigation measures. In line with industry standard guidance the improvements made are considered as having a “clearly noticeable” and “substantial” benefit to residents of the local properties.

