



**BRC Reinforcement**  
**Sustainability Statement 2023-24**



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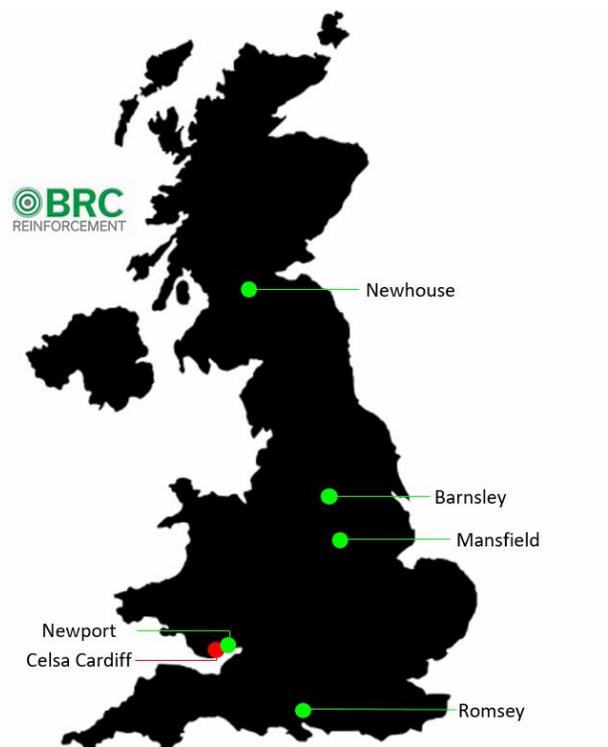
## 1.0 Company Information

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 recent iconic projects such as the second Severn Crossing, the Principality Stadium, Wembley Stadium, Merseylink Gateway, CrossRail, Aberdeen Western Peripheral Route, HS2 and Hinkley Point C Nuclear plant.

BRC 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, energy consumption, 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 are 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

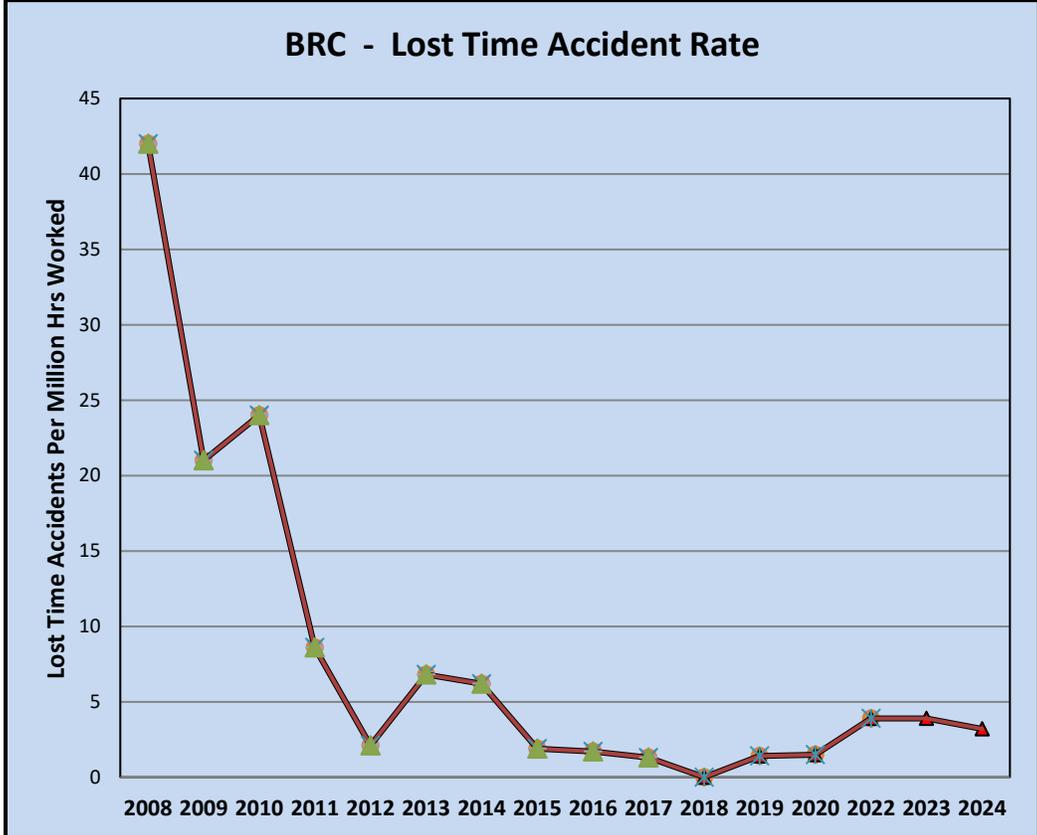
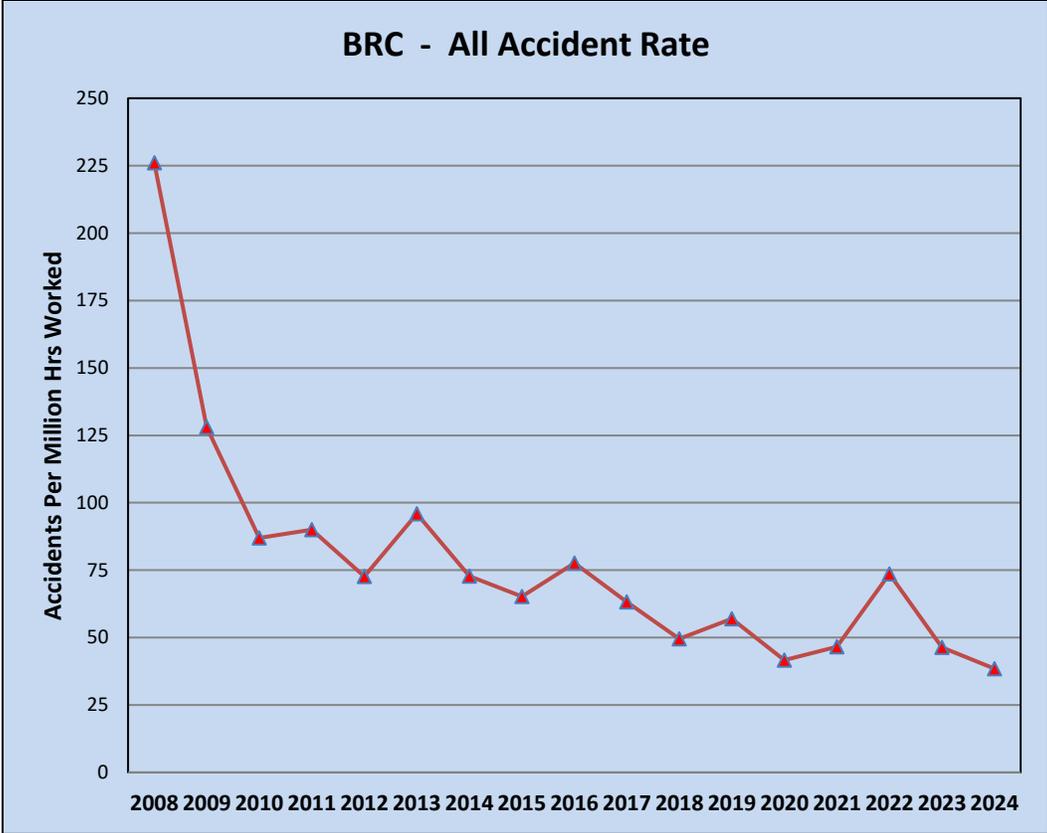
All BRC manufacturing sites operate a safety management system that complies with the requirements of ISO 45001. All sites are third-party approved to this standard, with copies of certificates available on request, and are on the company website.

In addition to the third-party audits required for ISO 45001 accreditation, all BRC sites are subject to regular internal audits and second party audits by the Celsa Group 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 Association) 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.

In previous years, 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 graphs below show the recent efforts in improving health and safety practices at BRC have resulted in a significant reduction in all accidents in general, including lost time accidents, over the last ten years. Whilst there was a negative impacts around the time of COVID this has been reversed in the last few years, continuing int 2024.



### 3.0 Environmental Initiatives, Accreditations and Compliance

Environmental data and performance are closely monitored, both internally by the environmental team and externally through the auditing and data submission procedures for the various environmental accreditations BRC hold. Some of these widely recognised accreditations include:

- ISO 14001, an international standard aimed at helping organizations minimize how their operations negatively affect the environment. Bureau Veritas 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)
- Carbon Reduction Commitment (CRC) Energy Efficiency Scheme, a UK Government-led scheme aimed at incentivising energy efficiency and reducing carbon 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 ensuring the constituent materials of construction products are responsibly sourced. BRC have received the rating 'Very Good' in our most recent audit.

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. Having been an integral part of the development of Version 3.0 of the standard alongside the other scheme council members, BRC became one of the first to be awarded the highest possible rating of 'Excellent' in our most recent 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. The data is used by BRC to set targets and to understand how our environmental performance compares with the industry as a whole.

A further initiative recently completed 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 has allowed us to understand more about the life cycle analysis of the products we manufacture. The EPDs can be found on the Environdec website.



## 4.0 Product Sustainability

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

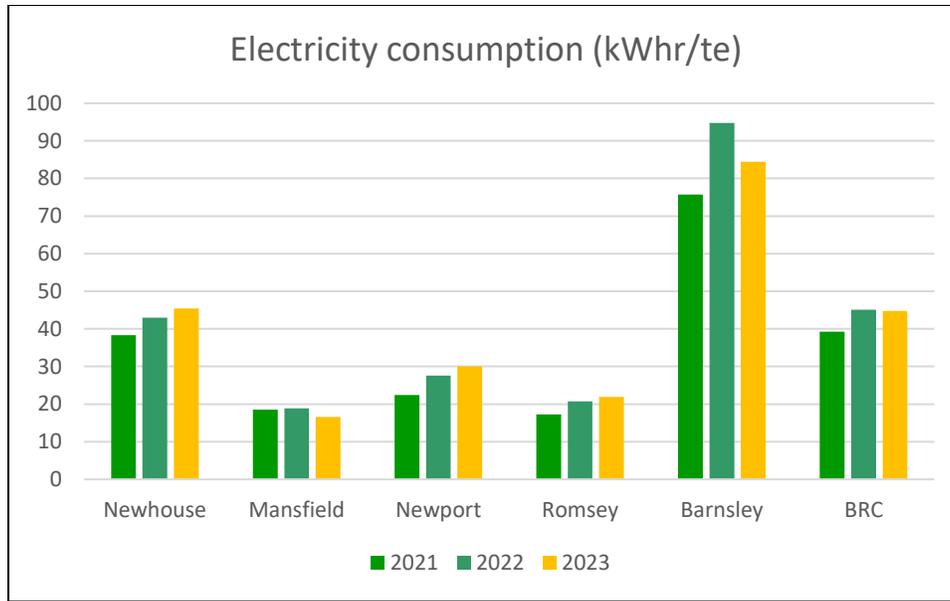
All of the steel used to manufacture BRC products is supplied by the Celsa Steel Melt Shop in Cardiff. This steel is produced from recycled scrap via the electric arc furnace (EAF) process. Steel production using the EAF method consumes only a third of the embodied energy, emits one sixth of the CO<sub>2</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 high energy consumption, 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 environmental 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, making Celsa the biggest recycler in the UK. The final 2% of 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 products stem from steel production, there are further impacts sustained during the product manufacturing process, which are summarised in the following sections. Environmental data presented here cannot be attributed to any particular BRC product – the EPD reports (please see section 3.0) do present environmental impacts on a product-by-product basis, however.

## 5.0 Energy Consumption

BRC are committed to continually reducing energy consumption associated with its processes to a level as low as is practically possible. The only energy used within the production process of our product is electricity (impacts associated with secondary energy consumption such as diesel and natural gas are covered within section 6.0), with recent data for electricity consumption displayed in the graph below. This consumption is reported in KWhrs/Tn of steel product, in addition to a 'performance vs baseline' figure which can be understood as the performance versus the expected electricity consumption given current production output. This is calculated using a regression analysis, taking into account production levels and historical electricity consumption. Energy consumption at the majority of BRC sites is comfortably below average industry consumption according to BAR Data 2022.



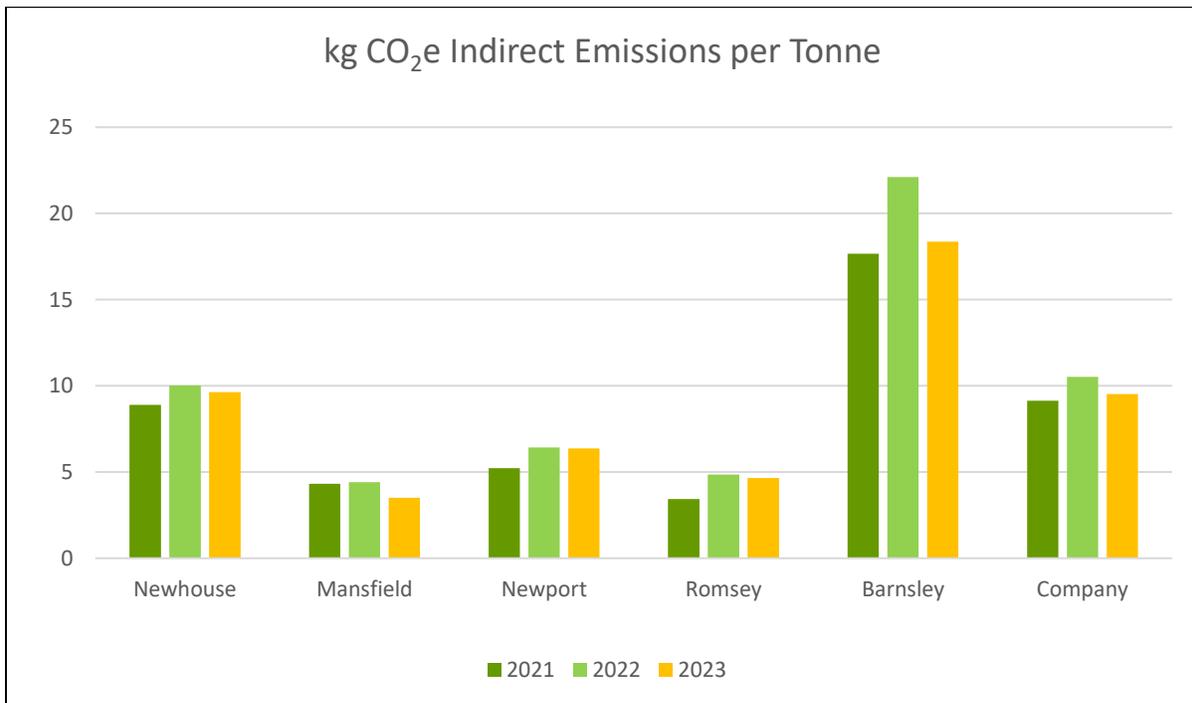
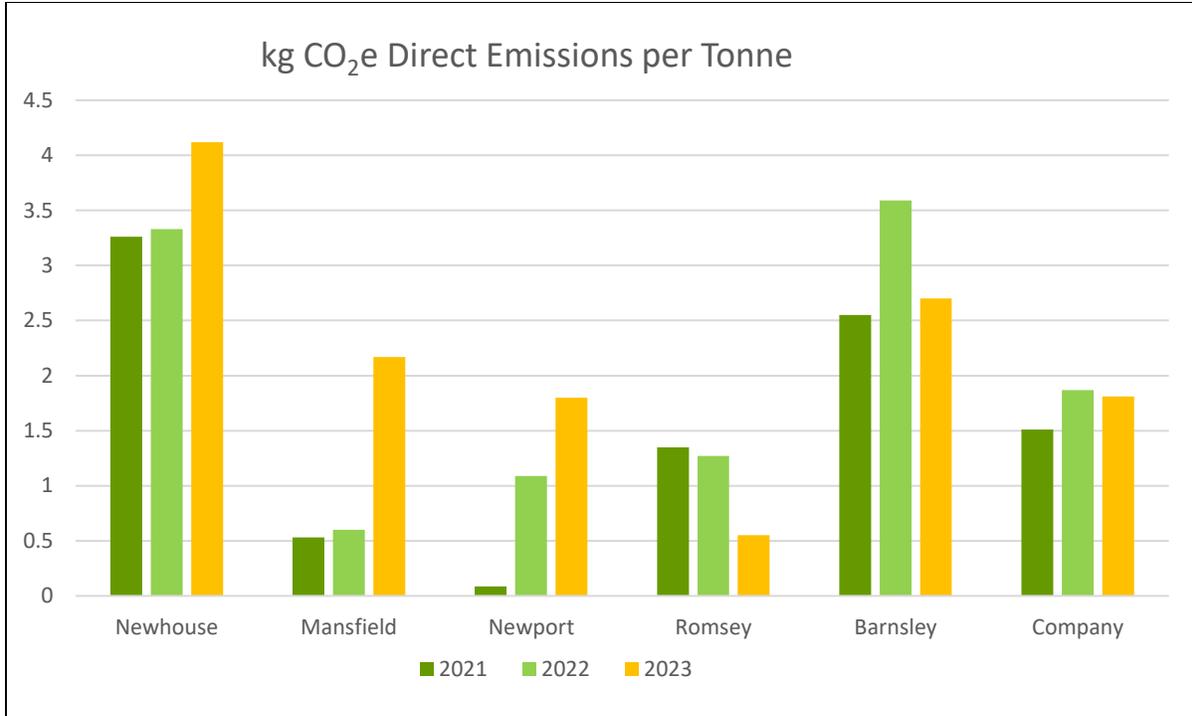
There was a small reduction in electricity usage per tonne from 2022 to 2023, with a larger reduction at the Barnsley site but the was offset by increases at the other site with the exception on Mansfield. This change is thought to be due to the product mix when supplying the nuclear type contracts for Sellafield and Hinkley Point C.

## 6.0 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 in reducing greenhouse gas emissions is recording these emissions as accurately as possible. Direct (scope 1) greenhouse gas emissions consist of diesel fuel used for on-site transportation and natural gas used for heating . Indirect (scope 2) emissions from our activities consist of electricity consumed on site. All greenhouse gas emissions are calculated based on Government emission conversion factors for greenhouse gas company reporting.

Recent levels of both direct and indirect greenhouse gas emissions are shown in the graphs below. There has been a small decrease in CO<sub>2</sub>e emissions for direct sources (3.2% reduction) and a larger reduction in CO<sub>2</sub>e emissions for indirect sources (9.4 % reduction), which when weighted give an overall 8.5% reduction in total CO<sub>2</sub>e emissions.

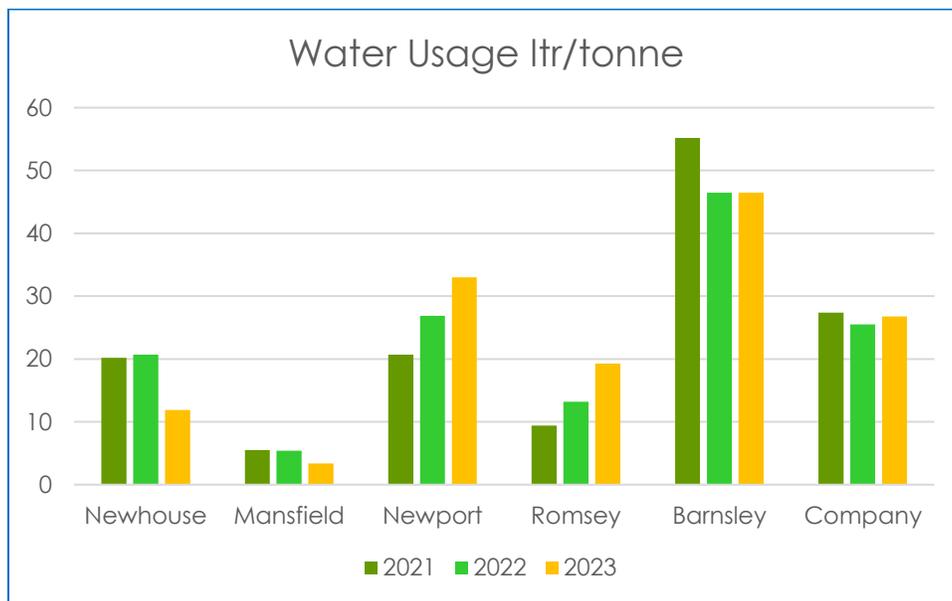
BRC prepared an EPD in 2020 which indicated a total GWP of 684 kg of CO<sub>2</sub>e per tonne of cut and bent reinforcement produced. The company has recently updated this EPD yielding a much lower figure of 497 kg CO<sub>2</sub>e per tonne. The vast majority of this improvement being through improvements the GWP of the raw material.



## 7.0 Water Usage

Despite there being no water abstraction within the production process of our products, 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.

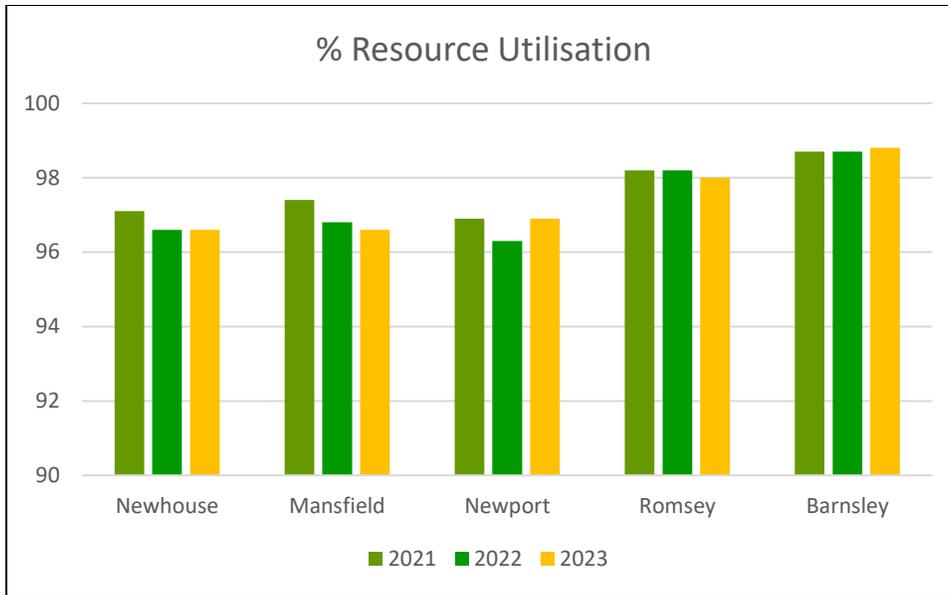
The overall water consumption for the whole company has been relatively flat for the past three years, in the region of 25-27 litres per tonne of steel produced.



## 8.0 Resource Use, Waste and Recycling

A further significant environmental impact of BRC operations is the level of waste produced at our sites and how this waste is dealt with. The BRC 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.

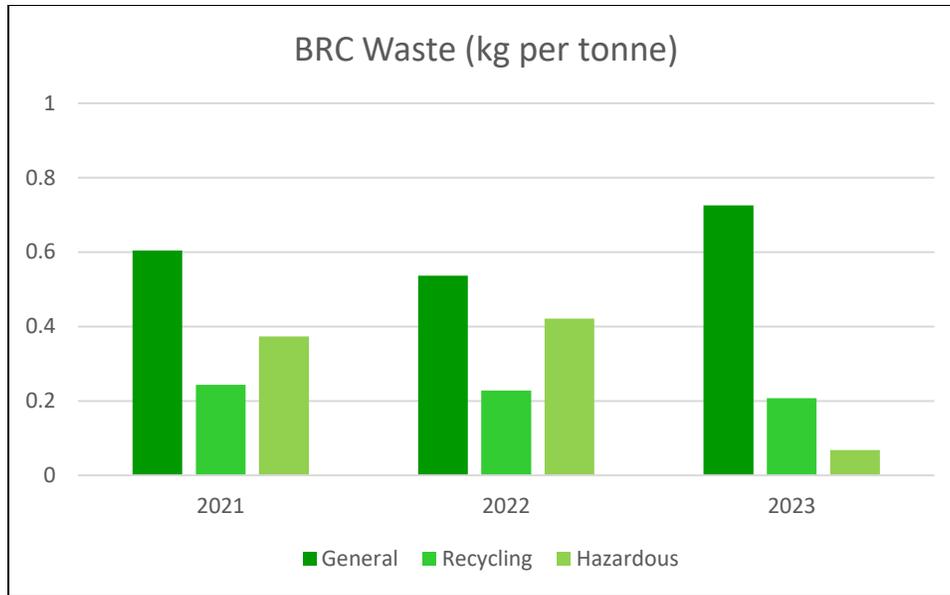
The majority of waste produced at BRC sites is scrap metal which is recycled locally. It is our aim to minimise the level of metal scrap produced by ensuring our resource utilisation rates are as high as possible (shown in the graph below). We aim to achieve a resource utilisation rate of at least 97.5% which has been met in recent years, performing slightly below average industry levels according to BAR 2020 Data. All of our products are 100% recyclable at end of life.



A recent circular-economy inspired South Wales scrap utilisation project has seen the company able to supply the Celsa Steel Mill with 1,068 tonnes of scrap metal which would have otherwise entered the open scrap market, in addition to the re-use of wooden pallet packaging materials, allowing us to ‘close the loop’ and save valuable energy in transport, manufacturing and processing. We are also running an integrated supply chain pilot study alongside a major Tier 1 construction contractor aiming to further push the boundaries of our circular economy capabilities, with the data gathering and analysis still ongoing.

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 using data supplied by our waste management contractor to keep track of our waste management performance. Currently, any non-hazardous waste which cannot be recycled is used for producing refuse-derived fuel, therefore none of this waste goes to landfill which means the company performs well below the industry average according to BAR 2020 Data. The graphs below show levels of waste produced in recent years for general waste, recycling (including plastics, glass, paper, cardboard and wood) and hazardous waste.

This data collection and monitoring procedure has recently changed to improve the accuracy of reporting which, alongside a TQM initiative, is considered largely responsible for the increase in some waste streams in 2018. In order to continually improve we plan to improve waste segregation and to undertake staff education on waste minimisation and segregation as per the latest waste management strategy.



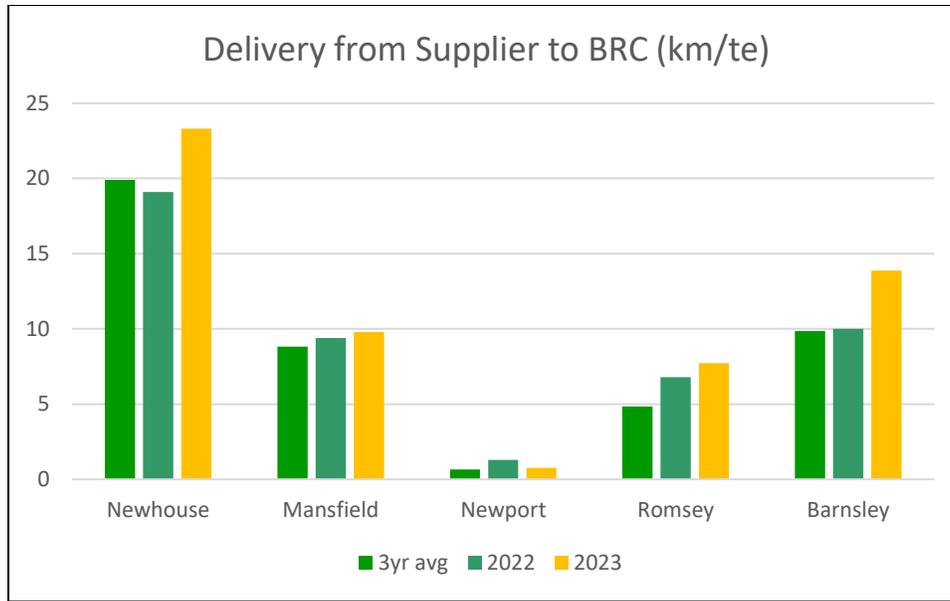
Our target going forward is to reduce overall waste (not including recycling) produced per tonne by 5% by the end of 2021 based on 2018 levels, to be monitored and reviewed annually.

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. Improvements in retrieval and recycling of packaging materials, in addition to reducing the amount we use, have been identified as key areas for improvement in 2021 with toolbox talks and other internal educational programmes already having taken place.

## 9.0 Transport

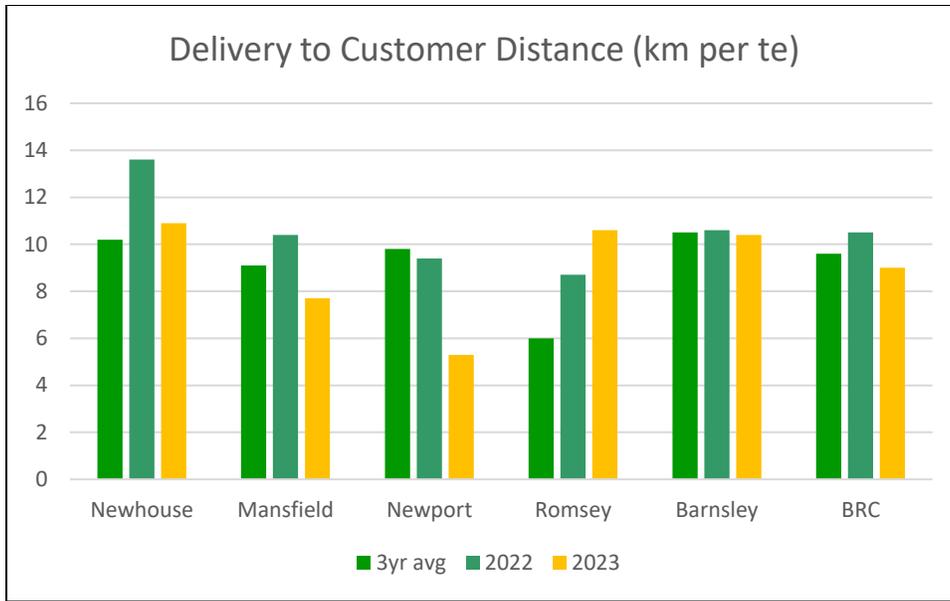
Steel is transported from the Celsa Steel Melt Shop in Cardiff to BRC depots via road, rail and sea, with the average distance travelled shown in the graph below. A new system for automatically tracking deliveries from our supplier is now in place, utilising an app to provide more data than ever. With this data we can further analyse our performance and continue to make improvements. We endeavour for each delivery to contain the maximum amount of steel as is practicable and safe in order to maximise sustainability.

There has been a general decrease in delivery efficiency due to specific operational issues from the supplier which should be corrected in 2024.

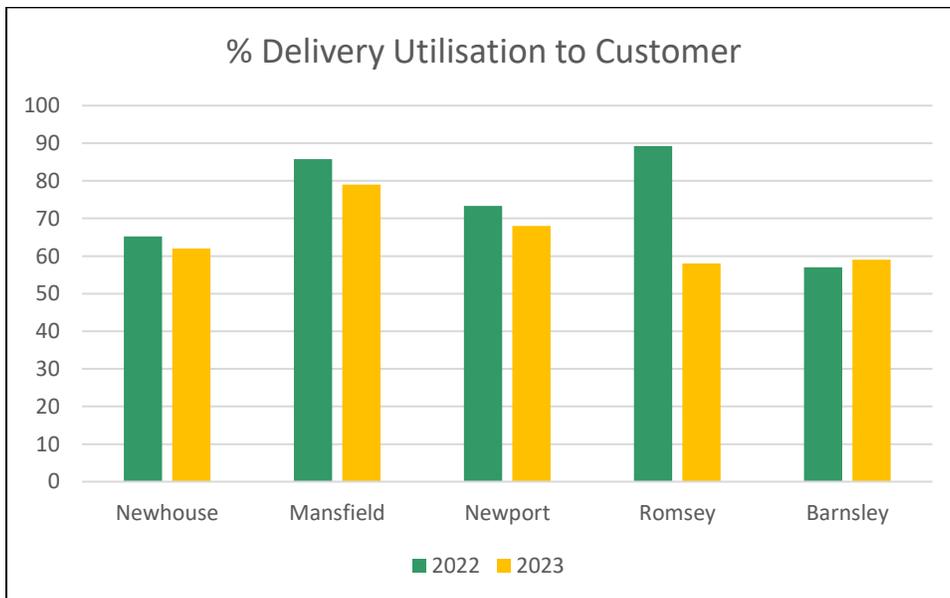


In partnership with its hauliers, BRC are committed to reducing the adverse environmental impacts of transport associated with the delivery of reinforcing steel to customers wherever possible. We operate on a national basis and where practicable deliver to customers from the nearest manufacturing site, also endeavouring to make use of returning vehicles from depots wherever possible through communication with our haulage partners. Our Transport Procedure sets out a methodology for identifying all significant environmental impacts associated with company transport activities, taking into account the likelihood of occurrence, detection, consequence and stakeholder impacts.

We aim to reduce environmental impacts associated with transport such as noise and disruption to the local community and wildlife by ensuring all customers’ delivery requirements are met where possible. Where necessary, mitigation strategies to overcome identified impacts include collaboration with haulage partners and suppliers, seeking new haulage partners and suppliers where necessary, process improvement of on-site transportation through analysis, communication with customers to identify delivery sensitivities, support of the Cycle to Work Scheme and a hybrid-only company car list. The graph below shows that the distance travelled per tonne of finished steel product delivered to customers.

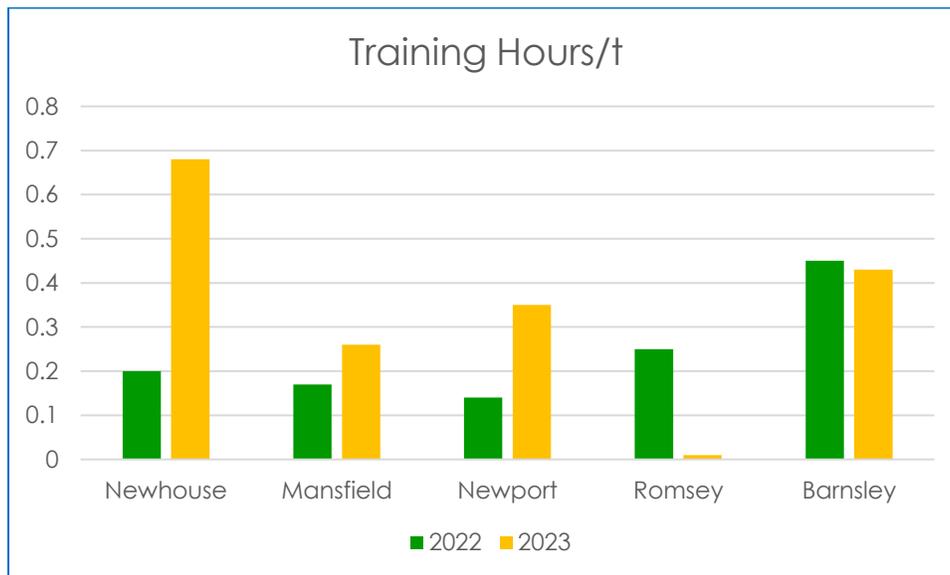


A further way we aim to reduce the environmental impact of transportation is through maximising the load per vehicle on deliveries to customers. Whilst recognising that for cut and bent reinforcement it is not possible to use the full capacity of a vehicle and still safely load and off-load the product, the company aims to achieve an average of 70% of the capacity of the delivery vehicle. The graph below shows that in 2020 we fell just short of this target and performed below average industry levels according to BAR Data 2020.



## 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. Training courses undertaken recently include safety, first aid, quality assurance, environmental awareness, project management, energy management, circular economy initiatives, sales techniques and recruitment. BRC has also offered support and guidance to its employees in attaining professional certifications in areas such as project management, health and safety, environmental management, quality assurance and human resources.



All staff undergo a formal induction into the company that includes an overview of the responsible sourcing principles detailed within ECO Reinforcement and BES 6001 (see section 3.0). 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 (in line with average industry levels according to BAR Data 2020) giving an opportunity to discuss their specific duties, opportunities for future learning and continuing professional development.

## 11.0 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 for customers and for other stakeholders who are demanding that we manage our impacts on the environment and society as a whole. In recent years BRC received one complaint related to noise, this was quickly and successfully addressed through work alongside the local council.

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 whom 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 the impact we have on the local community.



Our Local Communities and Considerate Neighbour Procedure sets out a plan to engage more with all stakeholders, carrying out regular reviews of engagement and local community relationships activities within our strategic reflection and management review process to ensure we are performing as well as possible. We aim to interact and give back to the local community wherever possible through supporting the charitable efforts of our employees, examples include; offering sponsorship for charity walks and runs; donations to local food banks; involvement with local children’s groups such as Beavers and Scouts; and taking part in national events such as Comic relief, the donation of our product to a local park development programme and Save the Children Christmas Jumper Day.

Local sourcing represents an opportunity for organisations to ensure a sustainable supply of goods and services while building a more locally based, self-sustaining economy and strengthening the social health of communities. Local sourcing is a key principle of our procurement strategy and we endeavour to use local suppliers and trade wherever practicable, as set out in the company Local Sourcing Policy, with examples of this including use of local catering and cleaning services. We see caring for our employees as a further method of benefitting our local community through offering access to the Cycle to Work Scheme, improving on-site welfare facilities by renovating communal areas, allowing flexible working where practicable and ensuring working conditions are as comfortable as possible.

## 12.0 Biodiversity

Biodiversity is being seen as an increasingly important factor for businesses to consider as part of their overall sustainability impact. Although seemingly having little direct impact upon biodiversity due to the industrial positioning of manufacturing sites and ultimate customer locations for reinforcing steel, there are numerous secondary and tertiary impacts associated with the industry. BRC has sought to evaluate biodiversity impact of our locations by undertaking biodiversity impact assessments at all of our sites which highlight current impacts and potential improvement strategies such as increasing green spaces, planting of native plant species, the addition of bird boxes and bee hives alongside local partners and supporting the work of local environmental charities. It is our aim to utilise these impact assessments to form biodiversity action plans which identify the most suitable improvement strategies for each BRC location. We also aim to extend the scope of the biodiversity impact assessments undertaken beyond our company locations to areas such as purchasing and transportation, and look forward to reporting on these activities in due course.