



ACO Sustainability

Statement Document 2022



Overview

- ISO 14001:2015 accredited across all activities.
 - Operational CO₂e emissions verified by independent third party.
 - Reduction in CO₂e of 34.5% between 2015 and 2022.
 - Green energy tariff electricity supply.
 - Carbon Neutral for scope 1 & 2 operations using gold standard offsetting credits.
 - Separated waste streams – 81% recycling of all waste.
 - First manufacturer to be selected as CO₂nstructZero Business Champion.
 - Setting science based targets to achieve Net Zero Carbon by 2045.
 - Partner of the Supply Chain Sustainability School
 - Measured embodied carbon within our polymer and StormBrixx SD range.
 - Started the Sustainability Committee to ensure all aspects of the company engage in sustainability.
 - Create the Habitat Matters Mapping System inspiring action for urban wildlife habitats.
 - Products designed to use recycled material and be recyclable at 'end of life'.
 - Products designed to reduce CO₂ emissions in transport and installation.
 - Suite of wildlife protection products.
 - Active in development of sustainable drainage.
 - Active in developing standards and guidelines.
 - Implemented a Responsible Sourcing policy.
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ACO's Business Activity

ACO Technologies plc designs, develops, manufactures and supplies Building Drainage, Waste Management and Surface Water Management products. Consequently we consider our core area of activity as protecting and enhancing the living and natural environment by providing products and design support that help facilitate the creation of integrated drainage solutions.

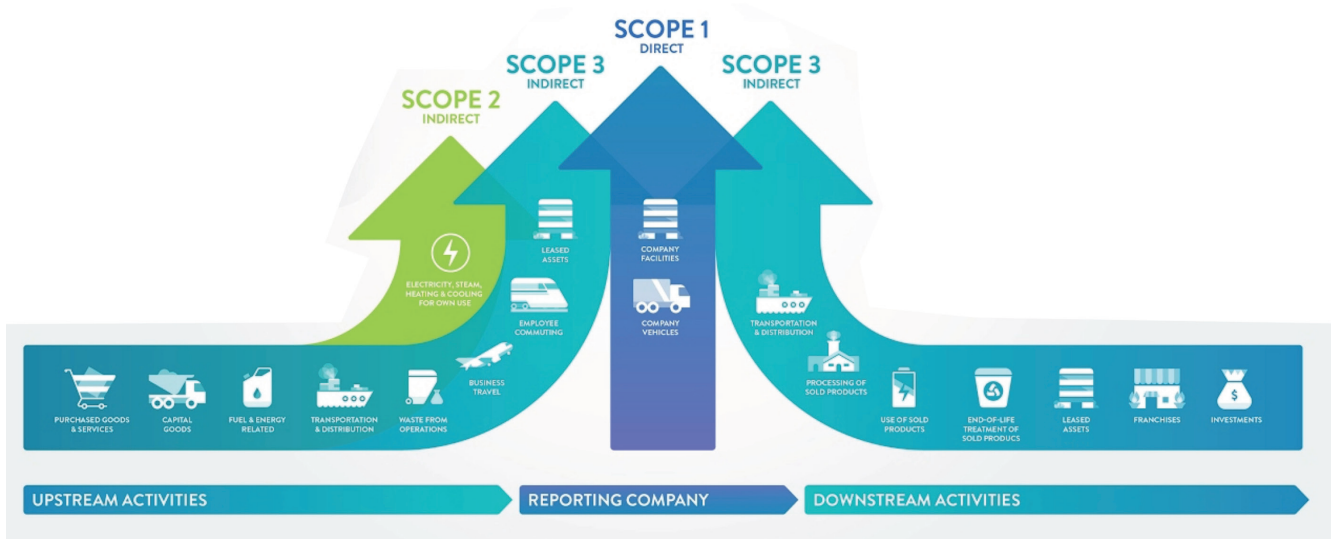
ACO Technologies plc has been certificated by BSI to operate an Environmental Management System which complies with the requirements of ISO 14001:2015. Captured in our Environmental Policy, the company is committed to complying with relevant environmental legislation and minimize the risk of pollution. As a minimum, we will do this in compliance with all applicable statutory obligations – exceeding these where possible to maintain market-leading credentials that better serve our customers, business and employees.

The Directors, Management and Staff are dedicated to upholding the highest levels of environmental responsibility across every aspect of the organisation, and constantly strive, in partnership with our suppliers and customers, to continually improve our energy efficiency, lower carbon intensity in operations and embedded within our products, and minimise our environmental and ecological impact throughout the life cycle of the product.

Environment

The first part of this has been to work on the impacts most directly under our control (also known as Scope 1 and Scope 2 emissions under the [Greenhouse Gas Protocol](#)) and measure the im-pact of our indirect emissions (scope 3):

- We have actively invested to measure and reduce our greenhouse gas emissions and our water usage;
- Our operational CO₂e ([CO₂ equivalent](#)) emissions are verified annually by a third party;
- We continue to develop new and existing products and source raw materials and services using the maximum practicable recycled material and environmentally sustainable resources wherever feasible;
- We have prioritised the reduction of waste throughout our operations. Where waste cannot be eliminated we have robust recycling provision;
- We have procured 100% renewable energy through the Renewable Energy Generation Origin certification scheme;
- We understand our continued impacts and offset operational carbon using gold standard credits aligning with the UN Sustainable Development Goals;
- We have added 100% electric forklifts to our fleet (Q4 2022);
- We have added electric cars to the company car policy and installing more car charging facilities across our operational sites.





In 2021, ACO were an inaugural member and the first approved construction products manufacturer to be part of the [ConstructZero](#) Initiative acting as a Business Champion. Working closely with the Department for Business, Energy and Industrial Strategy and the Construction Leadership Council who are leading the construction industry's response to the Government's Net Zero ambition.

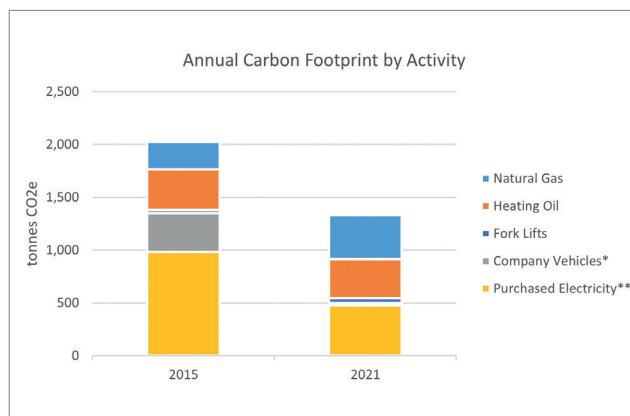
ACO have committed to the Science Based Target Initiative ([SBTi](#)) with the ambition to keep global warming to below 1.5C. We are constantly reviewing our structure, processes and strategic approach towards reducing carbon intensity and aim to be Net Zero Carbon in emissions by 2045. The SBTi defines and promotes best practice in science-based target setting. Offering a range of target-setting resources and guidance, the SBTi independently assesses and approves companies' targets in line with its strict criteria.

To achieve our commitments we continue to accurately measure Scope 1 and 2 and measured the embedded carbon of materials we procure and collected financial data on our Scope 3 emissions, particularly in our inbound and outbound supply chain, in order to work proactively with our suppliers and customers on ways to reduce our emissions during manufacture and across the entirety of the products life cycle.

Operational Carbon (Scope 1 & 2 Emissions)

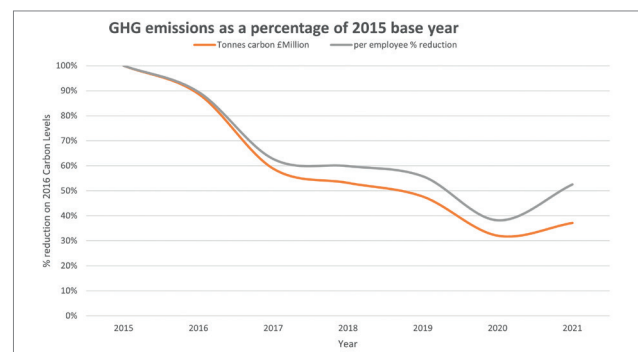
We manage our organisational carbon footprint in an open and transparent manner. The carbon footprint is calculated on an ongoing basis and independently verified every year. This is submitted to government as part of our [Streamlined Energy and Carbon Reporting \(SECR\)](#).

We recognise that 2020 was an 'unusual year' in terms of our operations but if we compare 2021 against our 2015 base year we have reduced operational CO₂e emissions by 34.5%. This has led to a 51% carbon intensity reduction per tonne of manufactured product in the same period.



The biggest change in 2020 was in emissions associated with travel with home working, lockdown and changing working practices. However, there was an increase in emissions associated with energy as grid demand increased dramatically and the energy mix changed. ACO switched to 100% renewable energy in October 2021, which should result in emissions reducing by 47% in 2022 on 2015 levels. Energy-saving devices have been implemented across our manufacturing facilities, such as LED lighting and energy awareness campaigns.

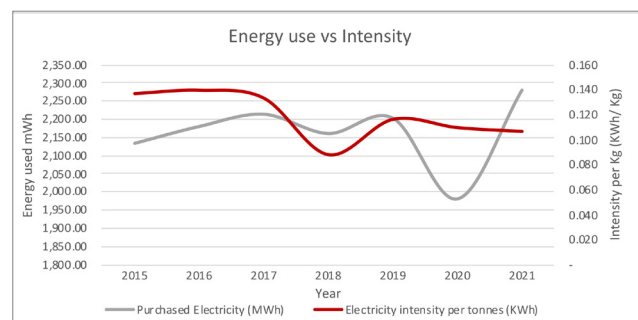
The decrease in emissions is against a background of growth for ACO and when we 'normalise' the emissions (tCO₂e per £m of turnover or employee) we continue to decrease emissions with the exception of 2020.



ACO built up to operational normal capacity again in 2021. We've learnt from the lockdowns and 'locked in' new ways of working that has resulted in environmental benefits and increased efficiency. This has mainly been around home and hybrid working for office staff and external staff using teleconferencing software.

Energy Use

Electricity use at ACO has increased steady since 2015 with a big jump in 2021 as we returned to normal business operations following covid. At the same time there has been a 22% reduction in energy intensity per kg of manufactured product produced. This is linked to energy efficient electric services, advanced manufacturing techniques and increased home working.



Water Use

As a proprietary product manufacturer in the Water Management industry ACO understand that water is a precious resource. Add to this the extra stress of climate change we have to use it responsibly. ACO uses water in manufacturing for wash-down processes, kitchens, restrooms and wash-down areas.

ACO have implemented water saving measures across the site from eliminating leaks, installing passive Infra Red (PIR) to urinals and shut off taps. Since 2018 ACO have reduced water consumption by 10%.

ACO Decarbonisation Compliance

ACO's decarbonisation strategy aligns with The Climate Change Act 2008 (2050 Target Amendment), which sets targets to reduce UK GHG emissions by at least 100% by 2050 on 1990 levels with 78% reduction by 2035. The interim six year budget targets are as follows:

- Budget 4 – reduction of 51% by 2025
- Budget 5 – reduction of 57% by 2030
- Budget 6 – reduction of 78% by 2035
- Net Zero Target – At least 100% by 2050

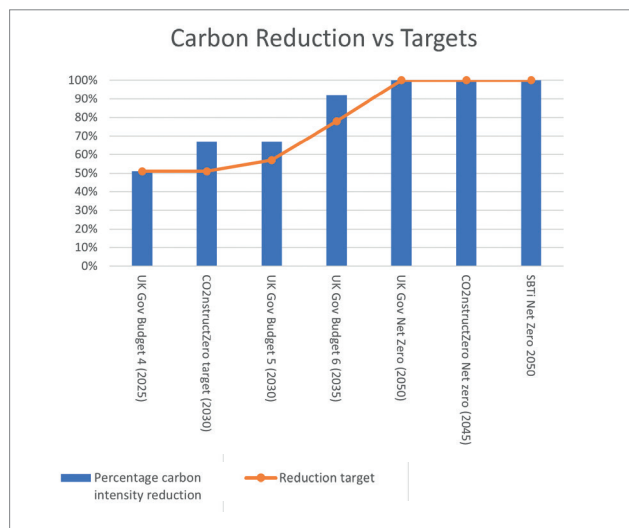
As stated ACO have signed a letter committing us to the Science Based Targets initiative (SBTi) to keep temperatures below 1.5° and CO₂nstructZero programme to achieve Net Zero Carbon before 2045;

SBTi targets

- Intensity reduction method year on year reduction:
 - o 4.2% scope 1 & 2
 - o 2.5% scope 3
 - o Net zero by 2050.

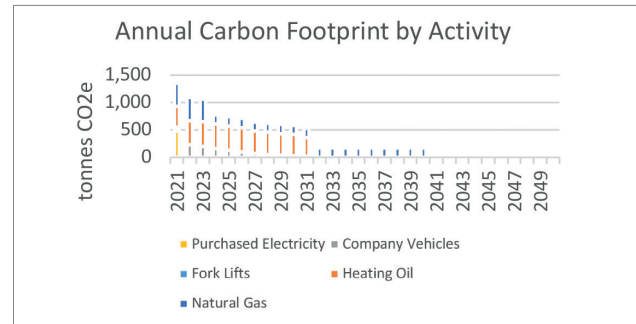
CO₂nstructZero programme

- 51% by 2030
- Net zero by 2045



ACO Targets

To remain compliant ACO have set absolute targets to reduce scope 1 & 2 GHG emissions by a minimum 57% by 2030 and Net Zero Carbon by 2045 from a 2021 base-year.



ACO have also set a carbon intensity target using a 'carbon intensity ratio' of tonnes of CO₂e per tonne of product to define emissions data in relation to our business. This takes account of direct scope 1 & 2 emissions. ACO are committed to further reduce Scope 1 & 2 GHG emissions by 50% per tonne of manufactured product by 2030 from a 2021 base-year.

ACO continue to measure scope 3 emissions and have invested in measuring embedded carbon. Since 2015 we have reduced the embedded carbon in our polymer concrete by 25%. ACO are committed to reducing scope 3 emissions by 23% by 2030 based on a 2021 base year.

ACO understand that our supply chain and the constituent materials make up most of our emissions. Therefore, we commit to 30% of our suppliers by spend covering the procurement of materials, will set science-based Targets for scope 1 & 2 targets by 3035.

Achieving our Goal

To achieve the targets set out above ACO need to drastically change the way we do business. We've started procuring 100% renewable energy in 2021, forklift truck are going 100% electric at the end of 2022. We have targets to switch over our leased company vehicles to 100% electric by 2030, reduce company car mileage 10% year on year between 2022 & 2027 based on a 2019 base year. Change the way we manufacture products to lower carbon alternative and change the heating systems in our offices and factory using heat pumps.



Offsetting Operational Carbon

ACO understand that as we progress towards low carbon manufacturing processes and business operations we still have a residual impact on the environment around us. We understand that its important to ensure that we mitigate our impact and support global initiatives where it is likely the developing world will feel the biggest impact of climate change.

We use Gold Standard and Verified Carbon Standard (VCS) offsetting credits that Align with all the UN Sustainable Development Goals. These support Agroforestry, Afforestation & Reforestation of land to sequester carbon, prevent flooding and create climate resilience. The offsetting also supports the installation of wind turbines to generate power. All these have a huge positive impacts on communities, ensuring improvements to livelihoods, health, and empowering people across the world.



Recycling and Recyclability (Product and Materials)

ACO Technologies recognises that sustainability of raw material is the single most important issue that the construction industry will face over the years to come. We have our part to play in the Circular Economy and all ACO products are manufactured from sustainable materials wherever practicable and are all designed to be 100% recyclable at “end of life”.



ACO products are designed and manufactured to perform to the required industry standards to ensure the appropriate level of structural integrity and water tightness. Our approach to the use of recycled material is adjusted according to material type.

We are very aware that recycled material also comes with a carbon cost and so must be used in the most effective and responsible way possible. It is important for us to use guaranteed consistency in quality of raw material to ensure product quality standards are met. This means using the optimum quality to eliminate any risk of either a poor performing product or negating the sustainability benefits of recycled material by downcycling.

ACO Vienite® (resin concrete) contains post-consumer recycled material, replacing 20% of the aggregate, without compromising strength or long-term performance and is 100% recyclable at end of life.

Managing materials in a sustainable way means that recycled material is not always available to meet the required standards. Therefore our UK manufactured thermoplastic products currently use a varying range of recycled content i.e. a minimum of 10% and maximum 52% recycled content by product weight.

Thermoplastic items procured by ACO Technologies are required to have maximum possible recycled content and for most this is 100%.

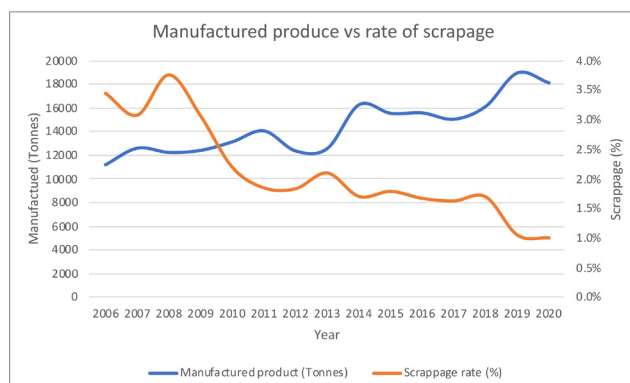
Metallic products are also required to have maximum possible recycled content. For cast iron components the recycled content is up to 100% whilst the specialist stainless steel used in Building Drainage products is typically delivered with 70% recycled content.

Recycling and Recyclability (Operations)

We have a robust programme of residues management ensuring that all packaging, pallets and office residues are segregated and managed in an ecologically sustainable manner. All office stationery is sourced from a supplier committed to providing eco-friendly products.

Residues of office stationery, cardboard, plastics' residues – including plastic and paper drinks' cups – and food waste are segregated for recycling by specialist processors. One successful initiative was to remove all individual waste bins from offices to maximize the separation of recyclable and non-recyclable waste at more centralised recycling stations. In 2019, our recycling rate across the entire business was 81%.

At ACO, we recognise that manufacturing waste is a significant contributor to our environmental impact, and we have taken steps to promote circular economy principles and reduce our scrap rate. One of our strategies is to implement overlapping shift changes to minimize waste. We also aim to prevent waste by avoiding interruptions when changing from one colour to another, resulting in some products having one colour at the base and another at the top. To ensure the highest quality of our products, we have a control system that ensures we use high quality materials to minimize product scrap once manufacturing is complete. We also leverage cutting-edge digital tools to maximize the number of products cut from each sheet of metal. Our efforts have led to a substantial decrease in our scrap rate, which dropped from 3.4% in 2006 to 1% in 2020, even as we increased production volume.



ACO segregated and recycled 99% of our manufacturing waste diverting it from landfill. This approach is in line with our commitment to operating as a circular economy company, and we believe it highlights our strong environmental credentials. Our rigorous waste segregation process ensures that all reusable materials are salvaged and either reintegrated into our existing manufacturing process or reprocessed off-site. Additionally, any waste that cannot be repurposed within our company is repurposed in the construction industry as hardcore, which further reduces the environmental impact of our operations.

Transportation, Distribution and Installation

ACO Technologies plc maximises inbound and outbound loads where possible to minimise carbon emissions. Diesel consumption has been identified as the most significant impact of the transport aspect of our business through our ISO 14001 environmental aspects register. Our freight supplier agreement control the impacts through the use of newer vehicles and regular driver training and monitoring on efficient driving techniques. Our main transport providers are all accredited to FORS Silver or Gold to meet the latest standards.

Where possible, ACO products are manufactured in the UK reducing emissions generated through inbound logistics (and also improving logistic security).

In distribution, we have saved 161 tonnes of CO₂ per year, against 2009 levels, (against a steadily increasing volume) by using freight providers that actively use lower emission vehicles and actively working with them to maximise product delivery volume per vehicle.

To deliver products to site we only use FSC certified wood pallets and optimise shipping geometry to minimise packaging. Electric forklifts are used for logistics across the ACO site, lowering the reliance on fossil fuels.

20% percent of the embodied carbon of a construction project is emitted during the construction stage. ACO products are designed to reduce the need for mechanical equipment for installation, lowering CO₂ emission on site.

We have also redesigned products to reduce the amount of concrete used in installation. In one example this resulted in more than 40% reduction of CO₂e per linear metre.



Supply Chain Sustainability School Partner

ACO Technologies plc are a partner of the [Supply Chain Sustainability School](#) and achieved gold standard accreditation having utilised the training facilities available online and through in person events. We recognise that Sustainability must be prioritised in every aspect of the business. Therefore, training resources from SCSS have been integrated into the internal ACO Sustainability Committee structure and the induction to the company.

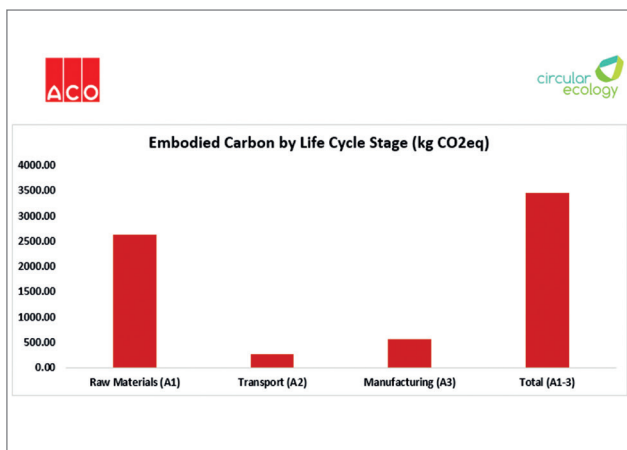


ACO are an active member of the school accessing 100's of training resources and are engaging in board & operations, category of spend and special interest group meetings to ensure every aspect of our business learns from experts in the industry.

We contribute to the video library with an [Introduction to Water](#) and provide expert advice for education modules pertaining to SuDS and water.

ACO Carbon Footprint Calculator

Measuring the life cycle carbon of a construction project is becoming increasingly important. ACO have started to measure the embedded carbon of our product portfolio initially completing our polymer range and StormBrixx SD. This is a cradle-to-gate analysis and a tool has been created for internal use. This will eventually be placed online and extended to a cradle-to-cradle analysis for all products.



Biodiversity

Habitat Matters Inspiring Action for Urban Wildlife Habitats

Formed through a collaboration of 19 partners, Habitat Matters aims to help the UK construction sector and the public to understand the intricate relationship between humans, infrastructure and the environment. The initiative aims to safeguard urban habitats and ultimately help tackle biodiversity decline.

Initially the focus of the programme was to educate the built environment professional about biodiversity in the built environment. Starting with an 8-part webinar series and 6-part podcast series.

The programme evolved into a free mapping tool that enables users to contribute to biodiversity and habitat records. It allows long-term monitoring of data, and encourages engagement between developers, communities, and nature.



Site Stewardship

As part of ACO commitment to biodiversity we have created a Biodiversity Action Plan, which forms part of the ACO policy structure.

ACO take Site stewardship at Shefford seriously and have committed to increasing the density and diversity of flowering plants, increase the number of refuges on the site for birds, bats, amphibians, and insects, and leave wild areas wild.

As part of the new site development, we are adding 10,000 trees and shrubs to support a diverse range of species and habitats including aquatic species.

Supporting Society

ACO understand that our operations and the products we sell have an impact on the health and wellbeing of our employees, the local community, and the broader public. ACO understand that we have a responsibility to society as a whole and aim to ensure that we provide the training and engagement required for a thriving work force and community.

Working at ACO

ACO are a national company with regional representation. Our manufacturing facilities are situated in rural areas and ACO contribute to local employment and provide the training required to thrive.

With wide ranging employee benefits including private healthcare, life insurance, pension, holidays, living wage pay and flexible working conditions. ACO also provide occupational health checks for all staff.

ACO provide staff with free hot drinks, exercise classes, maintain an onsite nature walk, outdoor seating and even a breakout room with pool tables, darts boards and table tennis along with other facilities.

The pandemic has impacted all of use in different ways both mentally and physically. ACO have taken steps to look after our employees and have specially trained mental Health First aiders and ran a campaign for Mental Health Awareness week in 2021.

ACO support staff with life skills training through the Employee Assistance Program, Health and Safety training and have a specialist internal training suite. For Sustainability we allow all our staff to have access to the Supply Chain Sustainability School and it forms part of the induction process.

Supporting our Community

ACO want to make sure we stand with the community and are an Emergency Response Team for the local Community. Providing facilities and resources in an emergency.

We have a STEM ambassador working at ACO who plans to work with local schools to educate them about engineering, water, SuDS, Nature Base Solutions and biodiversity. We also invite local schools to explore the ACO manufacturing facility and learn from our onsite Academy.

ACO have an off-duty committee which supports staff in extracurricular activities and events, ensuring we use local resources. Supporting our partners in the area by using local resources.

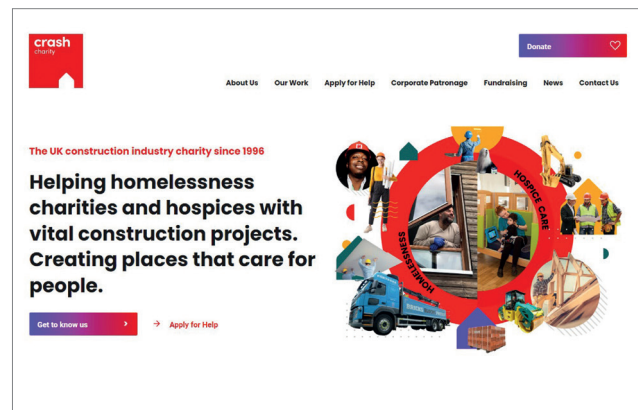


Listening to our community

ACO remains committed to maintaining positive relationships and a high level of satisfaction within the local community. However, in 2021, a local resident filed a complaint after ACO removed fencing and trees as part of the site development, resulting in increased light exposure. ACO responded promptly and worked closely with the resident to address the issue. ACO redirected the lights to minimize disturbance and are currently in the process of constructing large vegetated earth bunds to protect the community from noise and light pollution. This ongoing effort reflects ACO's dedication to fostering a harmonious relationship with the community and addressing any concerns that may arise.

CRASH

ACO are a corporate patron to the homeless charity CRASH. CRASH prevent homelessness by building vital homes and hospices throughout the UK.



Our Supply Chain

ACO understands the importance of sustainability in the supply chain and have a responsible sourcing policy for the procurement of goods and services, working with our supply chain and stakeholders to act in a socially and environmentally responsible manner.

ACO have updated the supplier code of conduct to reflect our ambition to run a sustainable business model, ensuring our suppliers and their sub-tier suppliers are compliant with international standards for Quality, Health & Safety, Environmental Management, Sustainability, Business Ethics and Human Rights.



Human Rights and anti-slavery

ACO has committed to limiting the risk of modern slavery occurring within our own business or infiltrating our supply chains or any other business relationship.

Our [Anti-slavery Policy](#) applies to all persons working for or on our behalf in any capacity, including employees, directors, officers, agency workers, contractors, consultants and any other third-party representative.

Other Environmental Activity

ACO actively engages with the SuDS (Sustainable Drainage Systems) community to develop products that follow the Collect-Clean-Hold-Reuse process chain and design those products to ensure interoperability with other SuDS methodologies, including the management of surface water to replenish groundwater.



We work with national bodies, regional planners and local authorities to develop environmental standards and guidelines for the sectors that use our products and services.

We produce a number of products particularly aimed at wildlife protection, including road crossing tunnels and guidance systems, wildlife kerbs, wildlife refuges, bat boxes and bird boxes.

The Way Ahead

ACO have committed to using Science Based Targets as a way to establish our year on year CO₂e reduction targets to achieve net zero by 2045 in line with intensity targets keeping temperature well below 1.5°C.

ACO continue to review our operation, manufacturing and delivery mechanisms to maximise efficient working practices and design out carbon and waste. We look to establish an accurate measurement for Scope 3 emissions in order to work with our upstream and downstream stakeholders to identify achievable reduction targets. We constantly review material selection and material science to maximise the resources we have at our disposal.

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ACO. we care for water

