



SUSTAINABILITY IMPACT REPORT 2025



British Glass



Glass
Technology
Services

INTRODUCTION

This report details our efforts to minimise environmental impact both internally and externally. It shares our sustainable innovations, collaborative projects, and industry leadership – all contributing to reduced carbon impact and the work we've done internally to foster a culture of environmental responsibility.

"As the representative body and technical partner of the UK glass industry, we take our sustainability responsibility seriously. We proactively guide the sector, ensuring it is well-equipped to position glass at the heart of a future circular economy. By setting a strong example, we support our members and customers through our practices, goals, and ambitions.

Through our pillars of 'People, Planet and Partnerships' we have set a path to orchestrate the shape and performance of our own staff and business practices to develop methodologies and support to our partners in their specific journeys, no matter how early or already established they are in their pursuit. We have solid metrics in place and have been measuring our performance along the way. While we have made improvements in many areas, we have also observed continued adverse trends, particularly in the impact of travel, which is now a specific target for the immediate future.

We have a responsibility to the sector and supply chain to lead by example and guide sustainable manufacturing. By working in tandem with governing administrations and the sector, we remain on track to achieve significant sustainability gains for UK productivity."



Dave Dalton

Chief Executive, British Glass and Glass Technology Services

OUR BUSINESS, PILLARS, AND GOALS

The British Glass group comprises British Glass Manufacturers Confederation, the trade organisation representing the UK glass industry, and Glass Technology Services, an independent test house and R&D consultancy delivering services to a global audience.

Our sustainability strategy was launched at the end of summer 2022 which contained an established action plan with short-, medium- and long-term goals to reduce our environmental impact, operate as an ethical business, and support our local community.

As an industry, the glass sector is on its journey to net zero and British Glass and Glass Technology Services are well placed to support members and customers towards their goals through research and development, political lobbying and information and guidance.

PILLARS

The sustainability strategy is built on three pillars – people, planet and partnerships.



PEOPLE



PLANET



PARTNERSHIPS

Our people pillar focuses on health and wellbeing, diversity, equality, equity and inclusion and people development. Planet focuses on our environmental impact and external opportunities in R&D, policy and net zero to support our industry. Finally, partnerships concentrate on our business practices, including relationships with customers, suppliers, responsible profit-making, and how our company is governed.

GOALS

During 2024, colleagues at British Glass have been working towards the following goals:



PEOPLE

Ensuring British Glass is a great place to work:

- Recognising employee achievements.
- Supporting learning and development.
- Ensuring that equality, equity, inclusion and diversity are embedded in our culture.

Sharing our knowledge and expertise:

- Working with our local community to raise young people's awareness of careers in STEM.
- Educational programmes and support.



PARTNERSHIPS

Developing services to meet customer sustainability goals:

- Focusing on the circular economy, container design and rightweighting.
- Working alongside members in flat, fibre, wool and the wider supply chain to identify decarbonisation opportunities.

Responsible business practice:

- Ensuring we operate as an ethical business.



PLANET

Monitoring and maintaining our post-pandemic carbon footprint levels:

- Implementing energy-saving strategies.
- Increase our understanding of our scope 3 emissions.

Supporting industry to achieve a net zero future:

- Net zero strategy progress update.
- Recycling roadmap production.



PEOPLE



As an organisation we are people-centric – we value our workforce and our aims, objectives and values reflect our people's worth. We don't focus our business solely on financial performance, instead prioritising wellbeing, development, and employee satisfaction to ensure we perform well to achieve financial targets.

CELEBRATING OUR PEOPLE

Our team continues to excel in professional development, showcasing a commitment to growth and excellence. In the last year, two members of our team successfully completed their apprenticeships to the highest standard, demonstrating exceptional skill and dedication. Additionally, one team member achieved a specialist qualification through the Chartered Institute of Public Relations (CIPR), while another proudly completed a degree-level apprenticeship programme through the Open University.

Currently, three employees are enrolled in apprenticeships, showing a promising future for their professional journeys. We also have a placement student gaining invaluable experience, and one dedicated staff member is pursuing a Chartered Institute of Personnel and Development (CIPD) Level 7 qualification, further enhancing our team's expertise and capabilities. This collective progress reflects our organisation's dedication to fostering an environment of continuous learning and achievement.

In June, two of our Glass Technology Services team members, Ellie Hagen and Adam Frith were nominated and won awards at the 2024 South Yorkshire apprenticeship awards. Ellie took home an apprentice of the year trophy with the judges commenting "Ellie's work ethic and positive attitude make her a standout candidate for the degree apprentice of the year award", while Adam was nominated by Ellie and named mentor of the year being recognised for his "ongoing support [which] exemplifies exceptional mentorship and dedication to fostering talent".

PEOPLE IN NUMBERS:

70+

hours in kind for
people in education

16

training
courses

6

online training
modules

100%

of staff completed sexual harassment
awareness and DEI training

SCHOOLS OUTREACH

In 2024 we worked alongside local STEM educational organisation Amazelab to deliver workshops to schools within our local community. We also continued our flagship Glass Guardians programme that saw engagement with schools from across the UK.

BETTER LEARNERS, BETTER WORKERS

British Glass and Glass Technology Services participated in the 2024 Better Learners Better Workers (BLBW) programme, an employer-led initiative aimed at equipping young people in South Yorkshire and beyond with essential knowledge, skills, and attitudes for the workplace. As part of this initiative, we visited two schools to offer interactive sessions on "careers in glass," led by two of our talented apprentices.

These sessions provided pupils with hands-on experiences, allowing them to engage directly with materials and concepts related to the glass industry. We also conducted a session focused on sustainability, where students explored the significant role glass plays in society and the environment. This programme reached a total of 120 pupils aged 9 to 11, providing them with valuable insights and inspiration for their future career paths.

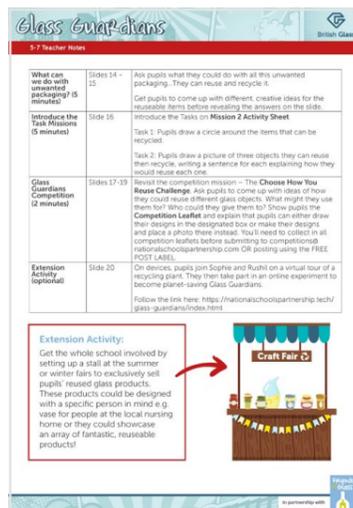
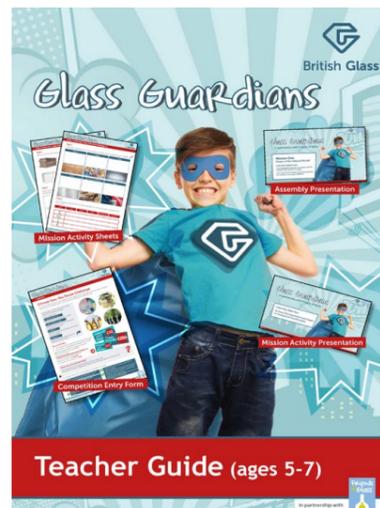
AMBITION UNLIMITED

The team at British Glass were also invited to be part of Delta Academy's Ambition Unlimited programme. This involved a visit to the Delta Academy head office where 175 students from 35 primary schools came together to learn about building sustainable cities. British Glass provided activities around recycling, energy and construction to help the students understand the environmental benefits of glass and its wide range of uses in construction.

GLASS GUARDIANS

Now in its sixth year, Glass Guardians – developed by the National Schools Partnership for British Glass – is an educational programme designed to engage primary-aged students in learning about glass and other packaging materials.

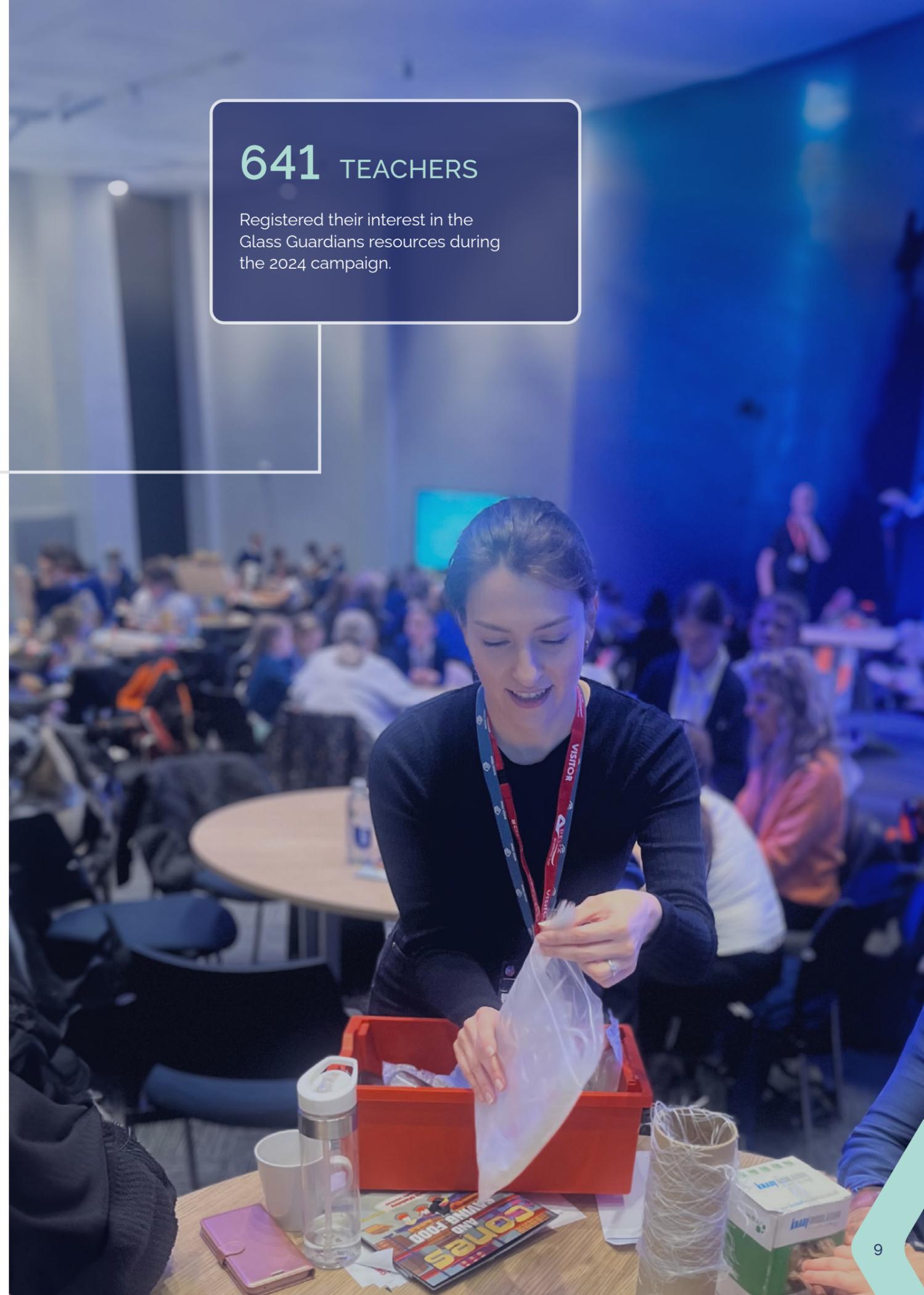
The programme features interactive activities and resources that help students explore the science and technology behind glass manufacturing and recycling while encouraging creativity by thinking about reuse. Students develop critical thinking and problem-solving skills while learning about the importance of sustainability and innovation in the glass industry. Glass Guardians is part of a broader effort to foster environmental responsibility and encourage careers in science and technology.



Glass Guardians resource pack for school children aged 5-7.

641 TEACHERS

Registered their interest in the Glass Guardians resources during the 2024 campaign.



PLANET

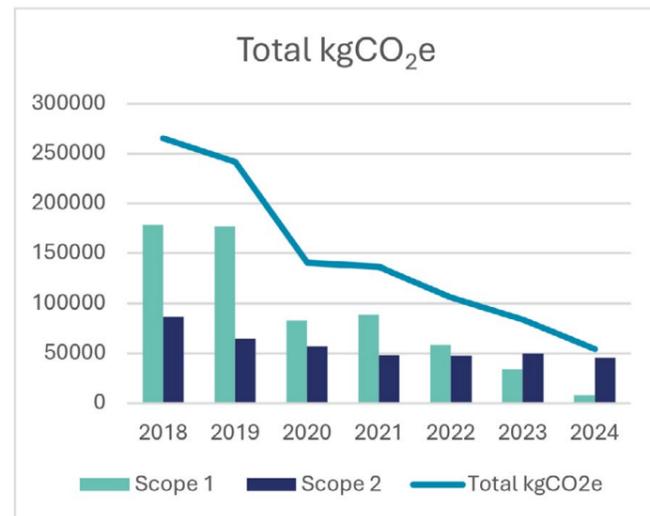


Our organisation and the wider glass industry have much to contribute towards lowering carbon emissions and minimising the environmental impact of glass.

Our carbon impact data is calculated using the UK Government's GHG conversion factors.

CARBON REPORTING:

The company's carbon impact analysis for scope 1 and 2 emissions is measured over a 7-year period from 2018-2024. We set a goal to maintain our post-covid levels in September 2022 and since then, we have continued to see an overall reduction. Significant savings have been made in scope 1 emissions from the reduction of our pool vehicles and business mileage, as well as updated heating and gas storage. Scope 2 savings have been made through lighting reviews and making use of sensors.



British Glass and Glass Technology Services scope 1 and 2 emissions (2018-2024).

SCOPE 3 EMISSIONS

Increasing our understanding of scope 3 emissions has been a key goal for our business. We have implemented a process and methodology for measuring travel bookings for all business travel, and monitoring and calculating personal business miles. We have also developed a method for calculating commuting miles. While our overall emissions objective was to maintain our post pandemic levels (to allow for increased travel and activity), our scope 3 emissions are rising year on year.

SCOPE 3 EMISSIONS IN NUMBERS

Scope 3 emissions (kgCO ₂ e)	2019	2023	2024
Personal business miles (cars)	-	6,192	8,088
Commuting	74,277	40,522	44,265
Business travel	-	7,281	10,609
Water supply	-	-	66
Water treatment	-	-	34
Homeworking	-	-	9,688



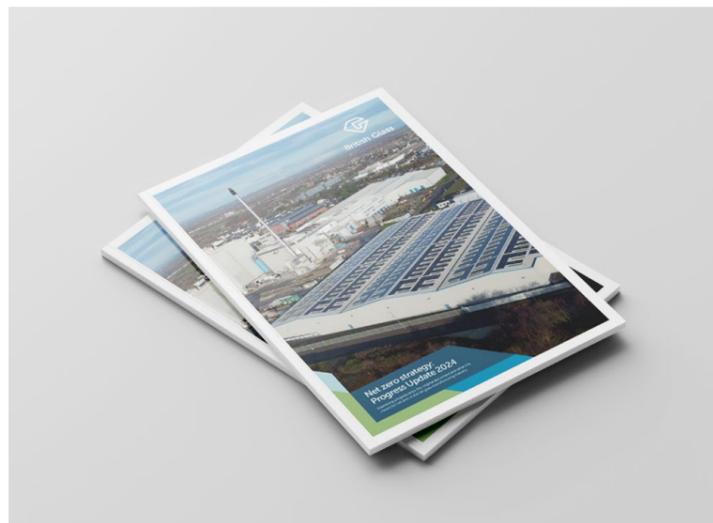
SUPPORTING INDUSTRY TO ACHIEVE A NET ZERO FUTURE

British Glass is playing a key role in supporting the UK glass industry's transition towards a more sustainable future by bringing together key stakeholders and pushing for policy changes. Collaboration is key to not just reduce the environmental impact of glass making but also ensure that the industry can thrive in a world that's becoming more and more focused on sustainability.

NET ZERO PROGRESS REPORT

At the end of 2024, British Glass released the latest progress report on the industry's 2021 net zero strategy. The report reviews advancements in carbon reduction efforts since 2020/2021 and updates on policy recommendations, highlighting challenges and opportunities. Acknowledging the critical role of glass in supporting low-carbon economies, the report emphasises the sector's commitment to decarbonisation through investments in low-carbon technologies and fuel switching. UK glass manufacturers are actively implementing investment plans to meet decarbonisation goals, which rely on supportive government policies.

Read the full report: www.britglass.org.uk/net-zero-progress-update-2024



**British Glass report:
Net zero strategy:
progress update 2024.**

GLASS RECYCLING ROADMAP

British Glass, in collaboration with WRAP, released a comprehensive roadmap outlining the steps to achieve a 90% glass recycling collection rate by 2030 and increase closed-loop recycling.

The report, titled "A roadmap to closed-loop glass recycling", provides a detailed analysis of current glass recycling practices in the UK, utilising the latest available data to identify areas for improvement. Key findings reveal that while the UK's glass recycling rate stands at over 75%, significant untapped potential remains, with approximately 600,000 tonnes of glass lost to residual waste annually.

The roadmap highlights the importance of transitioning away from co-mingling materials towards separate glass collections for glass as this is a key enabler to improving the final cullet quality for closed-loop recycling. Additionally, it highlights the need for reductions in the frequency and capacity of residual waste collections, aiming to incentivise recycling behaviours in consumers.

GLASS AND THE ENVIRONMENT

Glass is a versatile and sustainable material, made from natural resources and fully recyclable, reducing environmental impact. Recycling conserves raw materials and energy, as remanufacturing requires less energy than producing new glass.

Additionally, the fact that glass is inert means it doesn't release harmful chemicals – making it a safe choice for food and beverage packaging. In architecture, it enhances energy efficiency by maximising natural light and incorporating innovations like double-glazing and low-emissivity coatings to improve insulation and reduce heating and cooling demands.

In the automotive sector, continuous filament glass fibre helps reduce vehicle weight, improving fuel efficiency and lowering CO₂ emissions. Glass is also essential in wind energy, enabling the production of longer, lighter, and more efficient wind turbine blades. Furthermore, insulation wool significantly enhances energy efficiency in buildings. With its recyclability, energy efficiency, and importance in renewable energy, glass remains a key material for a sustainable future.

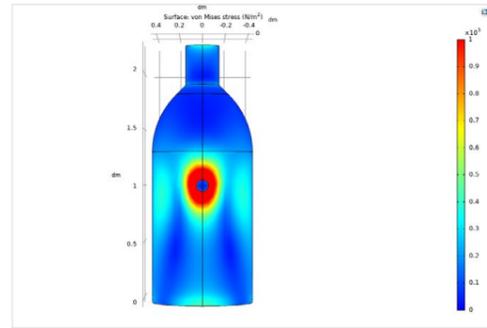
PARTNERSHIPS



Partnerships are a central part of what we do as an organisation. Whether that's our relationships with the local and global glass industry as the voice of UK industry, or our academic and technical partnerships in R&D and projects or our relationships with various sectors via our customers.

PROJECTS AND R&D

Working on environmental sustainability-related projects is a critical aspect of the glass industry's ability to decarbonise. Initiatives like rightweighting, which involves reducing the weight of glass products without compromising their strength or functionality, are pivotal in decreasing material usage and energy consumption.



Reuse projects focus on extending the lifecycle of glass products, thereby minimising waste and conserving resources. Additionally, exploring innovative glass compositions can result in more environmentally friendly products with reduced carbon impact.

Glass Technology Services has been at the forefront of these efforts for many years and during the last 12 months, we have successfully led and delivered 18 customer projects aimed at addressing environmental and sustainability goals. These projects not only reinforce the global glass industry's dedication to sustainability but also demonstrate the potential for significant positive impacts on both the environment and the economy.

SUSTAINABLE PACKAGING DESIGN

Glass Technology Services is a leading player in promoting sustainability in food and drink packaging by supporting brand owners in designing, manufacturing, and testing glass containers.

A key challenge for brands is the ability to meet sustainability targets without compromising their identity. We address this by offering expertise in rightweighting, a process that reduces the amount of raw materials used in glass production. This not only minimises the carbon impact but it can also lead to cost savings, as lighter containers reduce transportation costs and material expenses.

We have collaborated with globally recognised food and drink brands to improve their sustainability credentials whilst adhering to industry standards. These efforts not only provide excellent public relations opportunities but also position brands as innovators and market leaders in sustainability within the food and drink packaging sector.

OUR COMMITMENT TO SUSTAINABLE GLASS MANUFACTURING

"During 2024, we partnered with several clients to create innovative and sustainable glass solutions. We focused on significant weight savings through advanced bottle design, optimised manufacturing processes, and enhanced glass compositions. Our approach is supported by rigorous quality assurance testing and life cycle analysis to quantify potential carbon savings."

We guide brands in achieving their sustainability goals by researching potential partners and facilitating collaboration opportunities. Alongside innovative container designs, we have explored alternative raw materials and waste streams, developed new batch compositions, and conducted both small-scale melting trials and large-scale manufacturing trials. This important work helps to minimise virgin raw materials, effectively utilise waste streams, and reduce melting temperatures and in return, carbon emissions – reinforcing our commitment to sustainability in glass manufacturing."



Gareth Jones

Operations & Commercial Director, British Glass and Glass Technology Services

RESPONSIBLE BUSINESS PRACTICE

British Glass as a group operate a comprehensive quality management system to ensure we are acting in the best interests of our employees and customers, ethically, legally and by industry standards.

During 2024, 51 quality documents have been either introduced or updated. These documents cover administrative, technical, health and safety, environmental and HR procedures.

NEW POLICY DEVELOPMENT

The HR department has worked diligently to develop and refine internal policies, introducing 11 new policies and updating or rewriting eight others. These include enhancements to our maternity, paternity, adoption, shared leave, and neonatal policies, as well as the introduction of a fertility policy and a dignity and respect policy. Additionally, we have updated our EDI policies, including those on bullying and harassment.

In other areas, important policies such as test methods validation and measurement of uncertainty, environmental assessment, and business waste management have been reviewed and updated.

OUR 2025 GOALS

Setting sustainability goals allows us to continue measuring progress, encourage innovation, and raise public awareness. By focusing on near-term milestones, we can ensure that our efforts are aligned with longer-term objectives, ultimately contributing to a more sustainable and resilient future.

EXTERNAL GOALS

Engaging in the reuse debate (Planet/Partnerships):

- Ensuring glass has a strong voice in the UK reuse movement. Working with stakeholders to safeguard glass' sustainable future.

Educate industry and policy makers about the circular economy (Planet/Partnerships):

- Providing support and guidance to promote glass' role in the circular economy.

Bring the industry supply chain together to address sustainability projects (Partnerships):

- Working collaboratively on projects that enable developments in glass production as well as facilitating discussions across the supply chain to address key barriers to decarbonisation.

Commit to supporting science-based educational outreach (People):

- Continuing our outreach programmes with local schools, universities and post-graduate individuals.

INTERNAL GOALS

Supplier review (Partnerships):

- Conducting a review of our critical and standard suppliers to ensure they meet our sustainability values and can help us to achieve our goals.

Increase carbon awareness internally (Planet):

- By increasing carbon awareness with our people we can work to reduce our carbon impact on our scope 2 and 3 emissions.

Governance model review (Partnerships):

- Review our governance model to ensure it is sustainable.

Continue to develop a culture of equality, equity, diversity, and inclusion (People):

- Working on our internal and external communications to champion EDI.





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