



# TOAST

BREWING

## IMPACT REPORT 2024

- Published June 2025 -

# Raise a Toast to Planet Earth

Climate justice had some big wins in 2024. Planning permission for a new coal mine in Cumbria was revoked thanks to a Friends of the Earth challenge, and the High Court ruled that the government's climate strategy was not fit-for-purpose and breached the UK Climate Change Act.



We need more wins like these. 2024 was the warmest year on record, with global average temperatures crossing the 1.5°C Paris Agreement limit. Two-thirds of the Earth's surface experienced record-breaking heat with extreme weather events taking a toll on ecosystems, agriculture, communities and the economy.

Yet legal and societal pressures continue to be against citizen action. In the past 12 years, over 2,000 climate and environmental protesters have been killed, and many faced arrests and imprisonment. Goliath corporations are also fighting activists who try to hold them accountable as we saw with Shell attempting to sue Greenpeace.

How do we change the trajectory we're on? We know it needs all of us to be part of the solution. For businesses, we can relearn our ABCs - to create business models that Avoid harm, Benefit stakeholders and Contribute to solutions.

We set out to make beer that tastes amazing and does amazing things too. That's why we brew with surplus bakery bread, turning leftover loaves into liquid gold. We've reinvigorated a process that's as old as beer itself - our ancestors used the technique of fermentation to brew the first beers with bread over 5,000 years ago.

Using surplus bread to replace barley makes good use of one of the world's most commonly wasted foods and dramatically cuts back on the amount of land, water and energy we use, reducing carbon emissions and giving nature a break.

What's more, all our profits go to charities to buy Mother Nature a round. In 2024, despite rising costs and reduced consumption, we funded community gardens that connect people with nature, and supported Plantlife, the wild plant charity.

One-third of food is wasted globally. Reducing this waste is the fastest, cheapest and most equitable action to tackle the climate and nature crisis. Our mission is to do just that.

Let's raise a Toast to Planet Earth.



# Our Impact Business Model



## Circular Economy

We brew with surplus bakery bread, using 25% less malted barley than other beers. Our spent grain is fed to animals and spent hops are composted.



## Social Enterprise

We aim to make profit like other businesses, but have committed to donate distributable profits (a minimum of 1% of revenue) to environmental causes rather than shareholders.



## B Corp

The first UK beer company to become a Certified B Corp in 2018, we recertified in 2024 with 125.5 points. This means we meet high standards of verified social and environmental performance, public transparency, and legal accountability.



## Equity for Good

Under our unique ownership model, investors pledge to reinvest net capital gains in environmental projects so that value created does good, not harm. All Toast employees hold shares and there is a golden share to protect our mission.



## Responsible finance

We bank with the Co-operative Bank, our employee pension scheme is with NEST, and we work with Planet Protection to find the most environmentally sustainable insurance policy.



## Net Zero target

We measure our full carbon footprint. Most emissions occur in our supply chain so we're working towards Net Zero by 2030 with our suppliers and customers.



## Joyful activism

We prompt positive conversations over a pint, open-source a recipe for home brewers and collaborate with breweries to share and inspire. We're also active in campaigns for positive change.



# Impact Ripples Since 2016



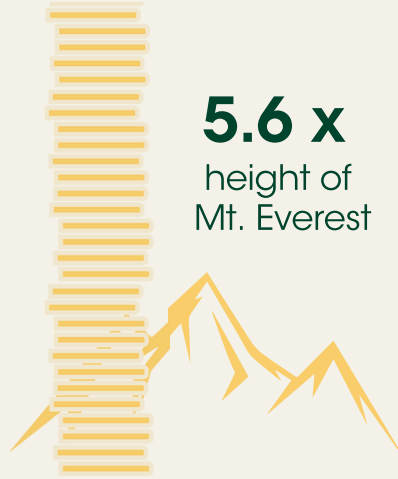
## Our Operations



**87.5 tCO2e**  
emissions avoided

**33 million**  
phone charges

**3,867,434**  
SLICES OF SURPLUS  
BREAD



**5.6 x**  
height of  
Mt. Everest



**336,381 m2**  
land freed up  
**1,789**  
tennis courts

**493,293 Ltrs**  
water saved  
**29 years of**  
showers



## Our Proceeds



**£127,468**  
DONATED TO FOOD &  
NATURE CHARITIES



## Our Influence



**15 MILLION**  
people reached  
on social media

**4.4 MILLION**  
CONVERSATIONS  
OVER PINTS



**104**  
brewery collabs  
in 10 countries



# Big Hairy Audacious Goal



In 2016 we set ourselves a Big Hairy Audacious Goal to prevent 1 billion slices of surplus bread from being wasted.

As more land is needed to grow crops for food and animals, it's changed from forests and grasslands - carbon sinks and habitats - to intensively farmed monocultures. These degrade and pollute soil, water and the air, and contribute to species extinction. How to reduce agricultural land and feed a growing population?

One-third of all food is wasted. To produce the food we waste, we use 1.4bn hectares of land (28% of the world's agricultural land), 250km<sup>3</sup> of water (439.95 trillion pints) and emit 3.3Gt CO<sub>2</sub>e (driving around the Earth 600 million times).

It's a no-brainer to reduce food waste, freeing up land, water and energy, reducing emissions, and preventing changes to biodiverse ecosystems. The brewing industry can help by using surplus bread, instead of crops like barley.

Bread is the most wasted food in the UK: 400,000 tonnes every year. Bakeries overproduce to meet unpredictable demand, sandwich factories discard loaf heel ends, and retailers overstock to keep shelves full. We also waste 1 million loaves every day in our homes.

Using surplus bread to reduce barley frees up land in the UK to grow other crops, and could reduce deforestation in sensitive biospheres. Protein-rich peas and beans could support more plant-based diets, whilst locally-grown soy for animal feed could avoid forest clearance in South America to grow soy for export.

A living forest can capture and store up to 3t CO<sub>2</sub> per acre every year. Deforesting an acre of Amazon rainforest releases more than 300 tCO<sub>2</sub>. Since 2016, Toast has freed up 83 acres of land by reducing barley use - indirectly supporting a carbon sink of 249 tCO<sub>2</sub> per year and avoiding 24,900 tonnes of CO<sub>2</sub>e.

We aim to inspire others to join us. We open source a recipe, share our experience and collaborate with breweries all over the world. We are working to simplify the supply chain for breweries, including an R&D partnership with Heineken.

UK bread waste could be halved by breweries in line with Sustainable Development Goal 12.3. If the 4 billion litres of beer brewed every year replaced 10% barley with surplus bread, we'd use 170,000 tonnes, reducing waste by 43%.



# Giving to People & Nature

We're legally bound to channel all our profits into spreading good through charities and community groups (rather than paying dividends for shareholders). Since 2016, we've given over £120,000 to make the world a little greener and fairer.

In 2024, we worked with **ActionFunder** to donate funds to local community gardens - little pockets of green doing big things for people and the planet. We funded four projects across London - Calthorpe Community Garden, The ClementJames Centre, Plot to Plate Community Garden and Lower Green Community Garden - all led by passionate volunteers and grassroots organisations.

Why gardens? Because growing food locally builds resilience, supports biodiversity and brings communities together. It's tasty activism at its best. Every garden we funded is helping to fight food insecurity, teach skills and reconnect people with food growing - all while making neighbourhoods a little greener.



We were delighted to win the 2024 Footprint Drinks Sustainability Award for Social Impact in recognition. But let's be honest, the real heroes are the legends out there digging, planting and opening up these spaces for their communities. A Toast to them.

In 2024, we also continued to support **Plantlife's** No Mow May and Let it Bloom June campaigns. Garden lawns allowed to grow wild can be great habitat to support biodiversity, and provide vital food for pollinators like bees and butterflies.

We brewed a limited edition beer that went down a treat at Groundswell festival's bar, and added a donation for every online order placed. We raised £1,500 to help Plantlife champion wild plants and fungi.



Our social media posts reached 14,000 people, while over 11,000 curious readers visited our blog to discover the perks of leaving the mower in the shed.

As the year drew to a close, we supported **Zero Hour** by sending campaign beers to MPs backing the Climate and Nature Bill, encouraging them to attend Parliament for the second reading. A Toast to those who did and for your ongoing action for climate and nature.



# Carbon Footprint 2024

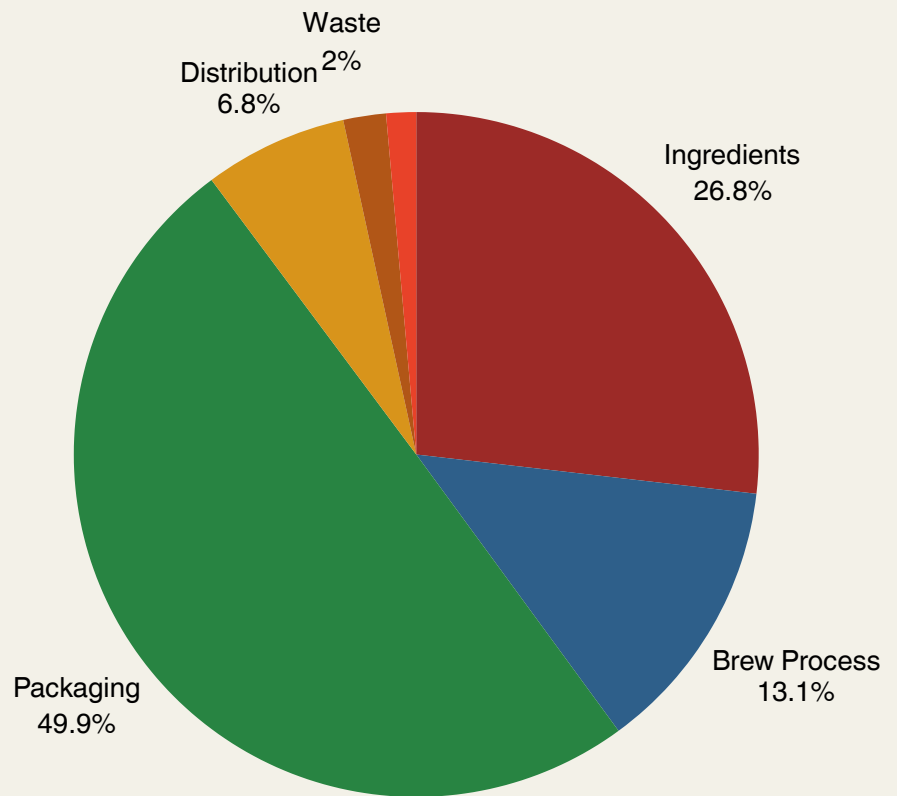
In 2024, our carbon footprint was 187 tCO<sub>2</sub>e.

Most emissions are Scope 3 - from sources that are not owned or controlled by Toast. We work with suppliers who brew and distribute our beer, to understand and support their efforts to reduce emissions.

By using surplus bread and reducing demand for malt, we have avoided emissions of 7.5 tCO<sub>2</sub>e (a net carbon footprint of 180tCO<sub>2</sub>e).

Follow the journey of our beer, from grain to glass, over the next two pages.

## Organisational Footprint 187tCO<sub>2</sub> (371 gCO<sub>2</sub> per Litre)



### Grassroots Pale Ale

Can (330ml): 132g CO<sub>2</sub>e  
 Bottle (330ml): 351g CO<sub>2</sub>e  
 Pint (568ml): 137g CO<sub>2</sub>e



### Rise Up Lager

Can (330ml): 114g CO<sub>2</sub>e  
 Bottle (330ml): 333g CO<sub>2</sub>e  
 Pint (568ml): 106g CO<sub>2</sub>e



### New Dawn Session IPA

Can (330ml): 134g CO<sub>2</sub>e  
 Bottle (330ml): 353g CO<sub>2</sub>e  
 Pint (568ml): 141g CO<sub>2</sub>e



### Changing Tides 0.5% Lager

Can (330ml): 107g CO<sub>2</sub>e  
 Bottle (330ml): N/A  
 Pint (568ml): N/A



# Ingredients

We source surplus bread directly from bakery partners. In 2024 we worked with EF Bakers, Geary's and Roberts. This bread is dried and crumbed for shelf stability and to improve its use in brewing, then used to replace about 25% of malt.

Other ingredients are sourced collaboratively with our brewery partners:

- Malted barley contains starches and enzymes to break the starches into fermentable sugars. Malt also adds colour and flavour to the beer.
- Oats give the beer a soft mouthfeel and some of the haze.
- Hops add aroma and bitterness, and are a natural preservative. We use all-English hops for our Rise Up Lager and Changing Tides 0.5% Lager. These don't have far to travel, need less irrigation, and are bred to be more disease resistant so use less pesticides and herbicides.
- Yeast converts fermentable sugars into alcohol and CO<sub>2</sub>.

# Brew Process

We partner with breweries, using their spare capacity minimise our land and capital equipment footprint. In 2024, we worked with Curious Brewery in Kent and Freedom Brewery in Staffordshire. We also operated a small brewhouse in Milton Keynes. We used this for R&D purposes and to produce limited edition beers for great causes, such as a coffee Porter stout with Change Please coffee.

- Gas is used to heat water during the mash stage, when grains are steeped to release sugars, and in the boil stages when hops are added to the sweet wort.
- Electricity is used to cool beer for fermentation and for the packaging process.
- Purchased CO<sub>2</sub> is used to purge tanks and package the beers, preventing oxygenation.
- Waste is avoided by sending spent grain to a local farm. Spent grains, high in fibre and proteins, are used for animal feed so reduce the demand for feed crops. Spent hops are used for compost, returning nutrients to the soil.



# Packaging

Nothing beats a pint from your local, and we're increasing distribution of our **circular steel kegs** by installing taps in independent venues. Our living founts are covered in moss that absorbs moisture from the air and brings nature to the bar. After use, kegs are collected to be cleaned, sterilised and refilled at the brewery.

Want a takeaway? A can of beer has half the emissions of a bottle. Aluminium is infinitely recyclable and 82% of cans are recycled in the UK (versus 68% of glass). Recycling saves 95% of the energy for mining bauxite and extracting aluminium by electrolysis. The average recycled content is 70-80% (versus 52% for glass).

Cardboard cases for cans and bottles use recycled and recyclable FSC certified board. Less is needed for cans as they're compact and less prone to breakage.



# Distribution

Vehicles are used to transport ingredients and packaging to the brewery, and to move the finished beer to UK fulfilment partners and our customers

Light, compact aluminium cans help us to reduce emissions from transport - they take up less space in vehicles, which need less fuel to transport them. This is more significant the further the beer travels, so we have a policy against export. Instead we collaborate with incredible breweries around the world who can produce locally.

# Use and Waste

Our beer stores under ambient conditions, but electricity is used to chill before drinking. Energy is also used by bars to dispense beer from kegs.



Disposal methods by the end customer impact the end of life emissions for aluminium, glass and board. Recycling retains the materials used to make it, reducing the energy and carbon costs of primary production.

# Net Zero Plans

We've measured all emission sources since 2019. Most emissions are scope 3, so our plan to see a reduction in these emissions depend on our relationships with others.

## Ingredients

- We're changing processes to maximise the extraction of fermentable sugars from bread so we can use more surplus. We've optimised the moisture content and the particle size, and are used adjuncts such as rice hulls.
- Barley farmed in a way that restores soil health and improves its ability to store carbon, and malted with low energy and water use, is still challenging to access. We are not brewing at a scale to purchase directly from farmers and contract the malting. We need maltsters, who are also committed to low carbon to offer widely to the market.

## Brewing

- The UK government has committed to decarbonise the national grid by 2030. It isn't currently economically possible for our small brewery partners to invest in renewable heat.

## Packaging

- We'll continue working with trade customers to support kegs for independent breweries.
- We'll continue to nudge consumers to choose cans over bottles.

## Distribution

- Reducing the transport distance for ingredients, packaging and finished beer reduces emissions from transport. Emissions from vehicles also need to be reduced by electrification of the transport industry, supported by EV charging infrastructure run on renewable electricity.
- Our website orders are delivered by DPD, who are moving towards an all-electric fleet by 2025 (currently 33%).
- Our London trade delivery partner runs an electric vehicle, with more planned for the future.



# System Change



## Companion®

- **Industry solution** - Our BHAG requires us to support others to overcome barriers to the circular economy. We completed a round of R&D to scale our approach under an InnovateUK SMART grant, working with Heineken International and other expert partners.
- **Impact measurement** We worked with Reading University under an InnovateUK accelerated Knowledge Transfer Partnership to measure the carbon impact of using surplus bread. This is informing our R&D work.

## Advocacy

- **The Climate and Nature (CAN) bill** - We support the Climate and Nature Bill - a cross-party private members bill to set legally binding targets on climate action and nature recovery. Add your support at [zerohour.uk](https://zerohour.uk)
- **Ecocide Law** - We support Stop Ecocide International's call for the legal recognition of ecocide as an international crime to deter destructive practices, protect Earth's vital ecosystems and catalyse positive system change. Join at [stopecocide.earth/](https://stopecocide.earth/)
- **Better Business Act** - We support the Better Business Act to remove shareholder primacy and ensure all UK companies align their interests with those of wider society and the environment. Join the BBA coalition at [betterbusinessact.org](https://betterbusinessact.org)
- **Mandatory Food Waste Reporting** - We urge the government to introduce legally binding public reporting requirements for large businesses to help halve food waste by 2030. The government committed to re-examine the scrapped plans in February 2024. We are still waiting. Follow our [blog](#) for the latest.

Whilst we continue to turn leftover loaves to liquid gold, raising funds for charity and awareness for nature, we are always looking at ways to support and influence wider change. If you're also working towards a better world for all, reach out. We can go faster and further together. Cheers!



# CHEERS



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