

# MAKE EARTH GREAT AGAIN



SUSTAINABILITY REPORT #5

## BREWDOG'S PUNKED-UP-PLAN

# LET'S ENSURE WE HAVE A PLANET TO BREW BEER ON

## BREWDOG HAS COME A LONG WAY.

We've grown, and we've grown up.

We have always believed that business should be a force for good and that brave thinking and bold actions are the only way to make real impact.

Today, we are in the middle of a climate crisis. It is a crisis of our own design, driven by big business. We recognise our contribution and the limitations of our industry.

## CHANGE ISN'T HAPPENING FAST ENOUGH.



## NOW IS THE TIME TO BE RADICAL IN EVERYTHING WE DO.

Climate change is close to a tipping point.

We created this problem, and now, it is time for us to solve it.

## ACTIONS NOT PROMISES.

Our mission has evolved to provide a blueprint for modern business; one which puts the planet first in every decision we make.

## BREWDOG TOMORROW

## THERE'S PLENTY OF HOPE, BUT ONLY IF WE ALL GET MOVING.

The climate news has been dreadful this year; heatwaves, floods and fires across Europe, North America and Africa. Ocean temperature records have not just been broken but smashed by a whopping quarter of a degree. This August saw an incredible 11% less Antarctic sea ice for the time of year than at any time since records began. The Canada wildfires alone added around 4% to the whole world's greenhouse gas emissions – just one example of how the effects of rising temperatures can trigger even more climate change.

If I thought that we were beyond hope, I would not do the work I do. But we also need to be realistic. Whatever we do now, the symptoms of climate breakdown are going to get worse before they stabilise. It is inevitable that there will be even more severe floods and fires, devastated harvests and many more 'climate migrants'. But if we take strong action it still looks likely that we can avoid the worst global consequences and most people may even be able to live better than ever before.

Since I've been working with BrewDog, there has been a magnificent carbon cutting effort. Here are a few examples of many; the brewing operation now runs highly efficiently and on renewable electricity; despite teething troubles, the new anaerobic digester will soon mean that BrewDog produces more gas than it uses; bottles have mainly been replaced by cans – bringing a surprisingly large carbon saving; tasty plant based meals in the bars are gaining profile and popularity; the excellent new solar energy project at BrewDog's warehousing in Glasgow. But most of the carbon cutting easier wins have now been had and BrewDog is still a long way off its hugely ambitious targets. We are going to have to look harder for the next round of savings. And, although we are not there yet, we may even find a limit to the amount of carbon it is possible to take out of each pint.

Meanwhile BrewDog's reforestation and nature recovery work at the Lost Forest has been a joy to see (do visit if you can) and they continue to fund sustainable afforestation work internationally that takes more carbon out of the air than BrewDog's total carbon footprint. (Note that we don't call it an offset because there is really no such thing.)

Looking forwards, we are going to have a deeper think about wider ways of influencing the climate agenda. What else can be done to help bring about the systemic changes that we need to get on top of the climate crisis? The next chapter could be even more exciting.

**Professor Mike Berners-Lee**  
Lead Scientific Advisor



# BREWDOG



A NOTE FROM BREWDOG'S CAPTAIN

*Dear people of the world*

AT BREWDOG, WE BELIEVE IN RADICAL TRANSPARENCY. AND WITH THIS MEGA REPORT, WE ARE PUBLISHING OUR MOST UP TO DATE EMISSIONS DATA. IT IS CLEAR THAT THERE IS STILL PLENTY OF OPPORTUNITY FOR IMPROVEMENT, AND AS A BUSINESS WE ARE FOCUSED ON THE MOST IMPACTFUL PROJECTS WITH LONG TERM POTENTIAL.

2020 was about low hanging fruit. Cutting emissions where we'd previously overlooked our impact on the Planet. 2021 was about adopting a fresh attitude to emissions and looking at long-term investments that will have a more significant effect overall. 2022 was about implementing those projects and starting to generate results.

In 2020, we set a target to reduce our emissions per HL of beer by 35% by 2023 versus our 2019 baseline, and we are still striving towards that target. Our aims were ambitious (as they should be) and we've made investments in excess of £20 million in the past 3 years, delivering opportunities for us to recycle and reuse

waste throughout our facility in Scotland.

The Lost Forest is now home to in excess of 500,000 saplings, half of our total target figure, as we deliver the UK's most ambitious afforestation programme. I was delighted to welcome our Equity Punk community to the Lost Forest last year to give them a chance to help plant native broadleaf trees, and see their investment first hand. We also welcomed more of our community back this summer, and have plans to host more events soon, too.

While we continue to invest in energy efficiency, recycling, waste reduction and rationalisation of our operations to reduce emissions, we also look at how our business impacts our people and our community. We continue to give Hopstock shares to our full-time salaried employees annually, and have now issued 2 year's worth of stock to our incredible, hard-working teams. We've also invested significantly in mental health support, neurodiversity assessment funding, and we're on track to become a menopause-friendly employer.

It is within all our interests to care deeply and thoughtfully about our surroundings and our communities. We will continue to uphold the highest standards for sustainability in our business and commit to protecting and supporting our people and their environment.

HOLD FAST,

*James*

UNITED WE STAND FOR

BETTER BEER FIERCELY DEFIANT AND INDEPENDENT



# OUR CARBON

When we count 'our carbon', we count all of it; this includes not just the direct emissions which occur at our breweries and bars and the emissions from electricity we purchase, but also the emissions from our entire supply chain, globally.

# OUR PROBLEM

**WE'RE TARGETING A**

**35%**

**CO<sub>2</sub>e REDUCTION\*  
PER HL BY  
END OF 2023**

**COMPARED TO OUR**

**2019**

**BASELINE!**

\*CO<sub>2</sub>e, "carbon dioxide equivalent", covers all the greenhouse gases.

# HOW WE DID IN 2022

EACH YEAR WE GAIN MORE OF AN INSIGHT INTO HOW BEST TO CALCULATE OUR EMISSIONS, WHICH IS WHY WE PROVIDE UPDATES ON PREVIOUS YEARS IN EACH MEGA REPORT WE RELEASE. ANY CHANGES WE MAKE ARE ALWAYS CARRIED THROUGH TO DIRECTLY COMPARE THIS YEAR TO LAST, PROVIDING A FAIR AND CONSISTENT NARRATIVE ON OUR EMISSIONS.

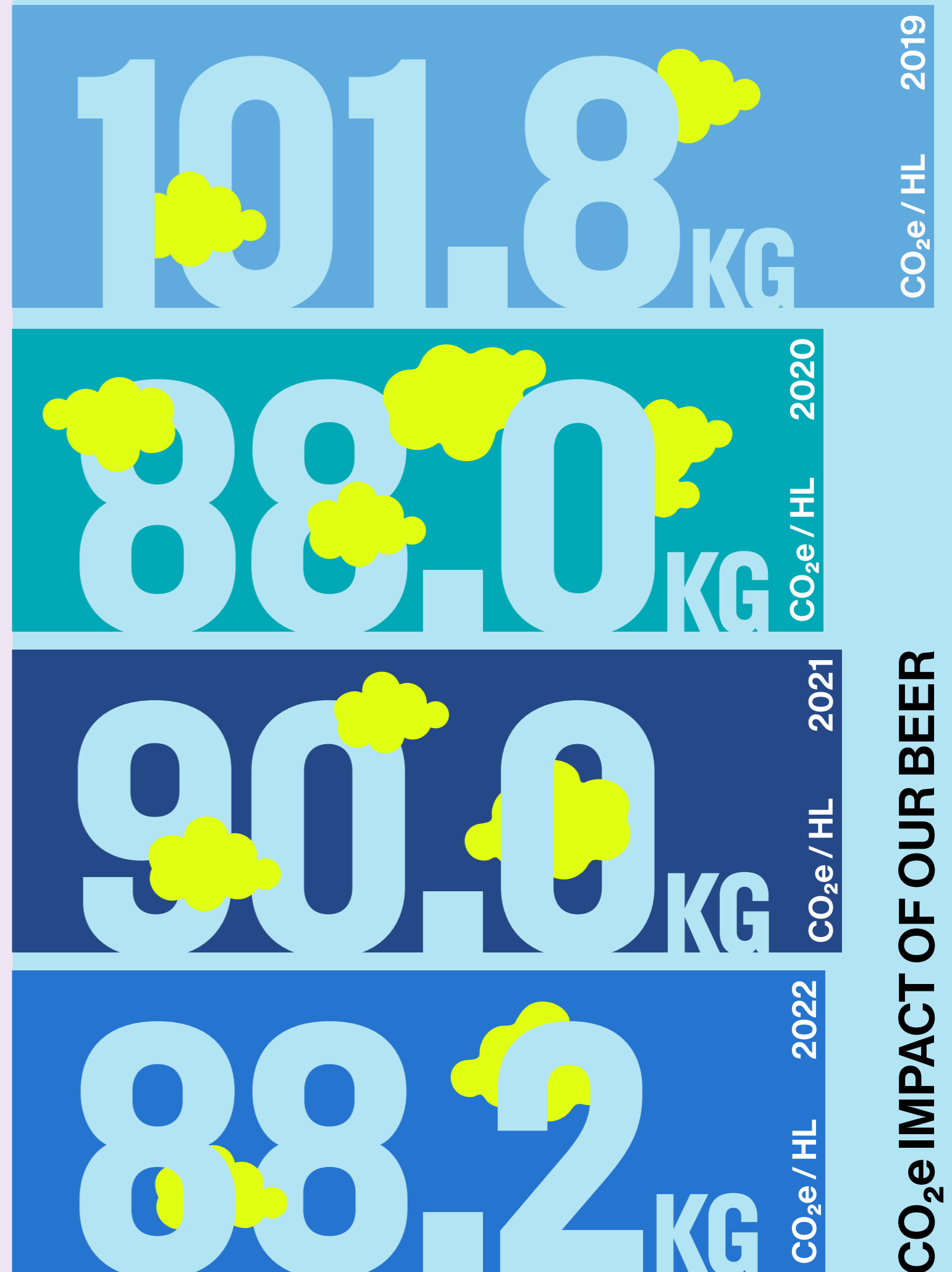
HERE ARE THE KEY LEARNINGS FACTORED IN TO THIS YEAR'S REPORT:

**1** We've accurately split our merchandise purchases to show the difference between our Retail impact and our online purchasing, in order to help increase accuracy in reporting our bars' emissions.

**2** We now count our CO<sub>2</sub> emissions from the start of a beer's journey through to the minute it's served to you in can, draft pour or bottle.

**3** Australia's scope 2 emissions fell drastically in 2022, likely due to the country's movement away from fossil fuels. Nice one, Australia!

**4** Our Scope 1 emissions have risen due to an increase in propane consumption as well as gas consumption. This is due to operational requirements for the AD plant during a challenging year for commissioning. Long term, this facility will considerably reduce our waste and emissions, however the impact of its installation pushes our emissions up in the short-term.



● CO<sub>2</sub>e IMPACT OF OUR BEER

# EMISSIONS IN OUR BREWING OPERATIONS

UK PRODUCTION (HL)  
**866,175**

BREWED WORLDWIDE  
ENJOYED IN ELLON

EMISSIONS (tCO<sub>2</sub>e)  
**72,584**

GERMANY PRODUCTION (HL)  
**18,022**

BREWED - IN - BERLIN  
DRIVEN - BY - PASSION  
UNITED - BY - BREWDOG

EMISSIONS (tCO<sub>2</sub>e)  
**1,613**

AUSTRALIA PRODUCTION (HL)  
**4,236**

BREWED IN BRISBANE - AUSTRALIA. DRIVEN BY PASSION AND UNITED BY BREWDOG

EMISSIONS (tCO<sub>2</sub>e)  
**572**

USA PRODUCTION (HL)  
**64,767**

COLUMBIA BREWED IN OHIO - USA. DRIVEN BY PASSION AND UNITED BY BREWDOG

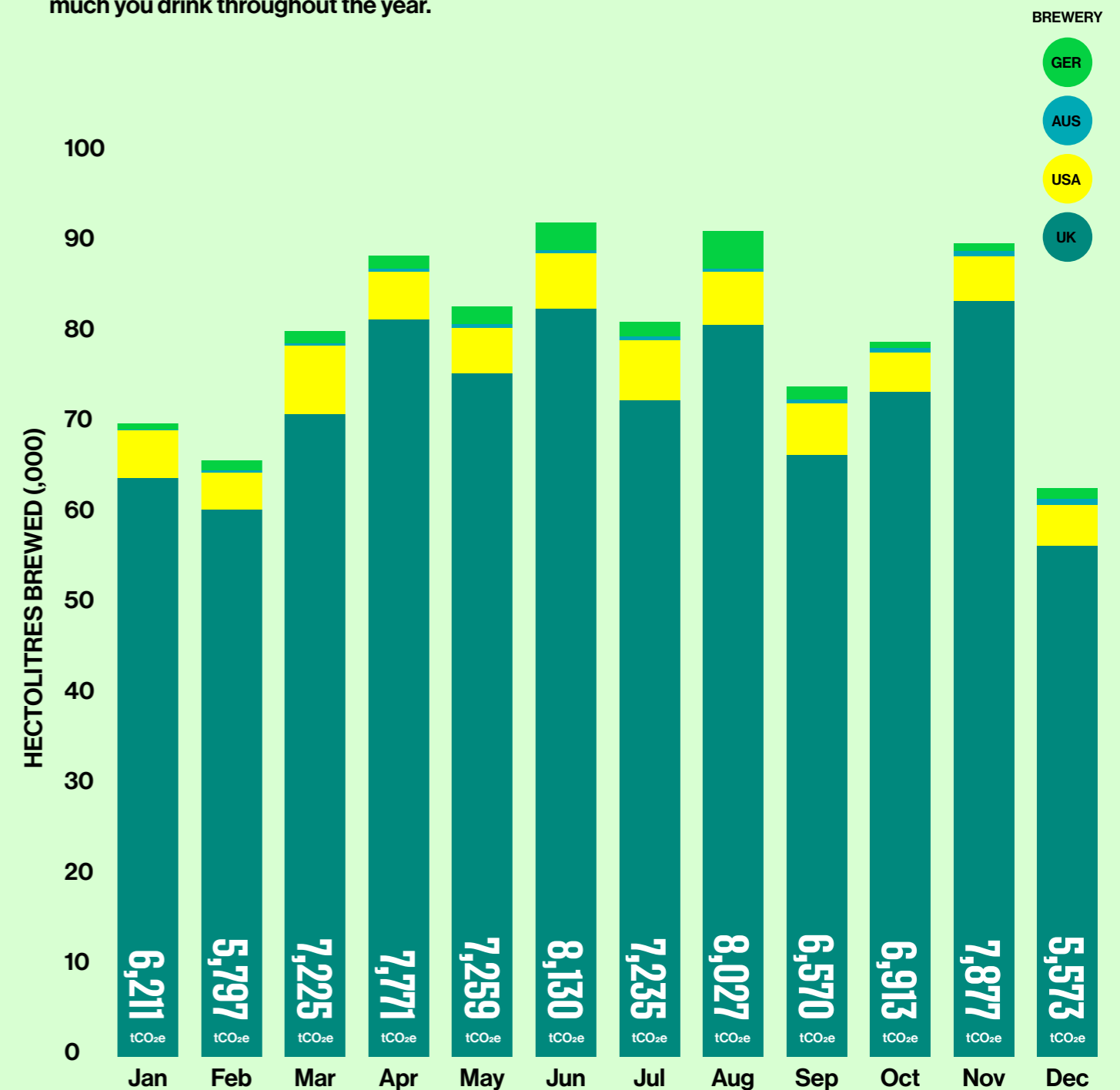
EMISSIONS (tCO<sub>2</sub>e)  
**9,819**

OUR AIM IS TO DECREASE THE EMISSIONS PER BEER AS FAST AS WE POSSIBLY CAN.

The metric we use enables us to reflect the emissions in terms of how much beer we make. If you drink 1HL of our beer (equal to 300 cans of Punk!) that equates to 88.2 kgCO<sub>2</sub>e, but we invest in high-quality environmental projects that keep carbon in the ground and take it out of the atmosphere, allowing you to drink guilt-free.

Because our brewery is designed to keep up with your beer drinking requirements, our emissions are dependent on how much you drink throughout the year.

CO<sub>2</sub>e PER BEER  
**0.29kg**  
CO<sub>2</sub>e / 330ML CAN



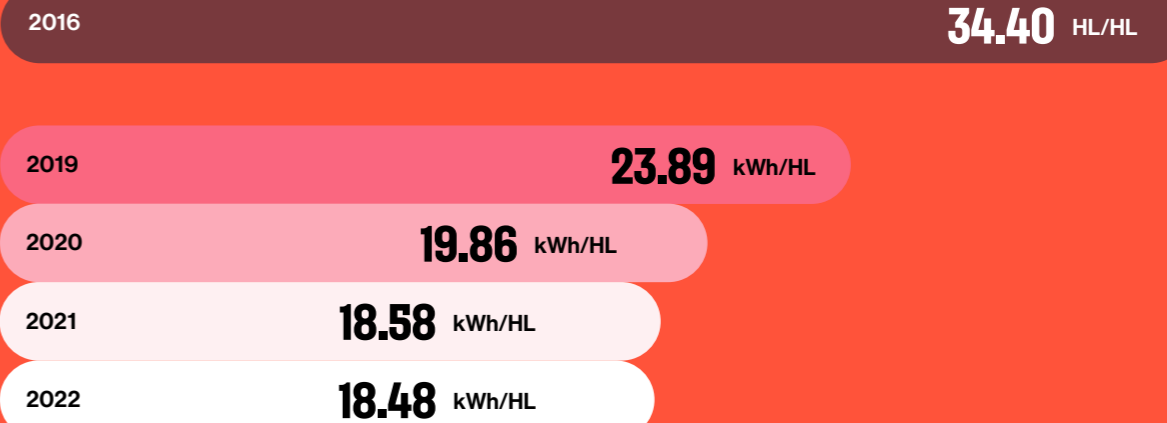
When we talk about our emissions per HL, this is where our data comes from, we don't count retail in our manufacturing emissions so we have an accurate, global representation of our brewery impact.

We have been tracking our production efficiencies at HQ and ensure these are a business priority. With gas now flowing from our very own BrewDog Bio-Energy plant, the way we use energy has never been more important!



## GAS REDUCED FROM 2019 TO 2022 BY 47%

Gas usage improved from 2021 to 2022 due to ongoing boiler improvement project



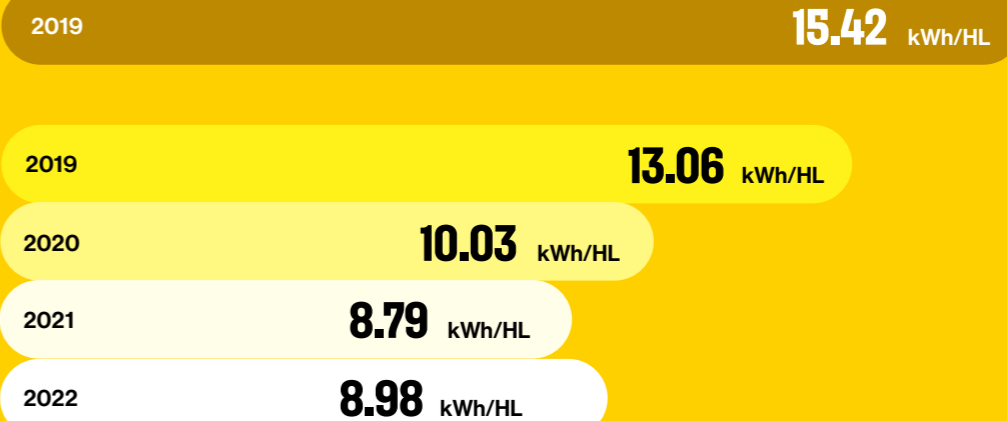
## WATER REDUCED FROM 2019 TO 2022 BY 54%

Water increased from 2021 due to commissioning new kit



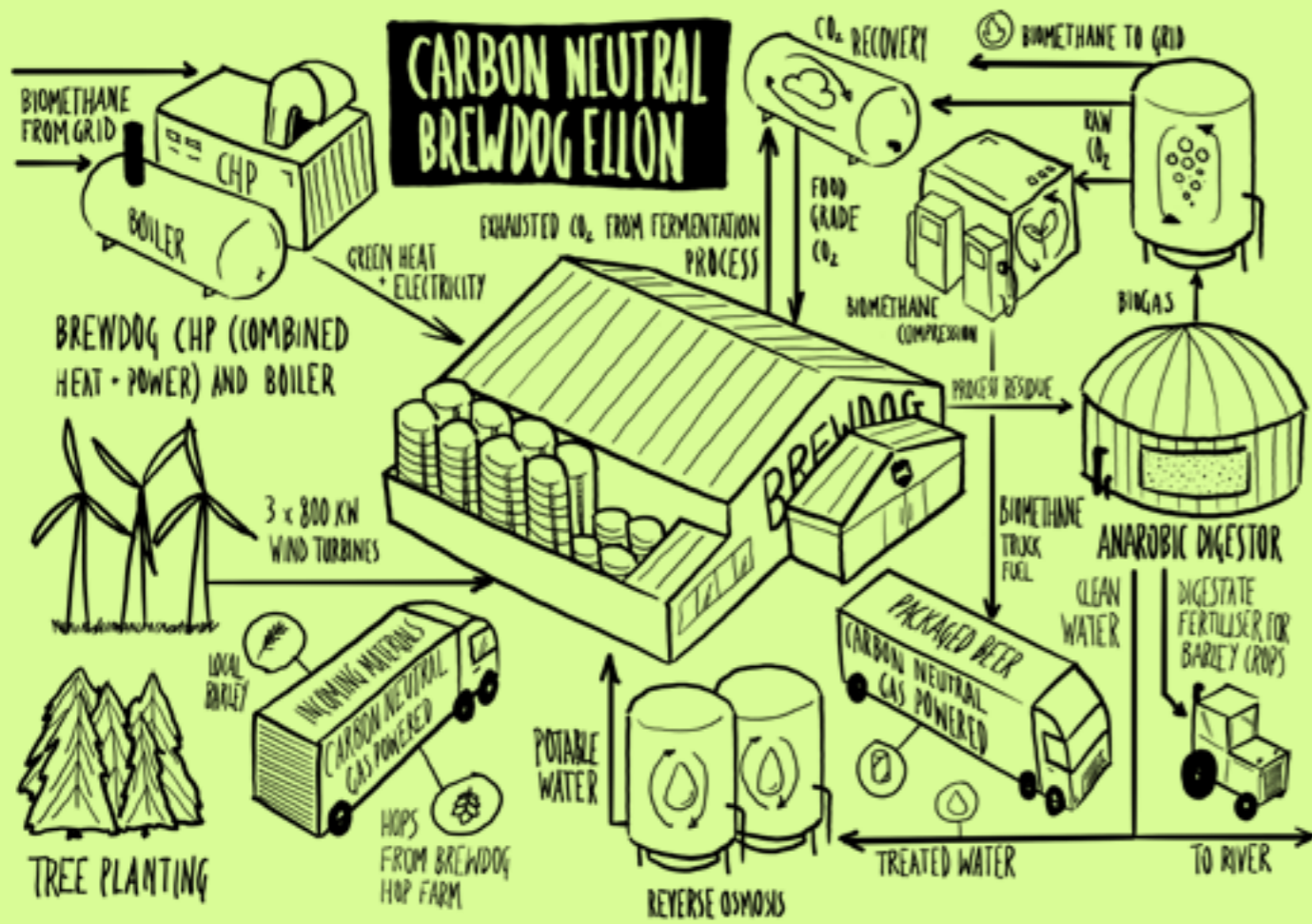
## ELECTRICITY REDUCED FROM 2019 TO 2022 BY 42%

Electricity increase from 2021 due to commissioning operations of AD plant





**IN 2020 WE SET OUT WITH A PLAN TO REDUCE OPERATIONAL EMISSIONS FROM OUR ELLON BREWERY TO ZERO BY 2023.**



**24 MONTHS  
TO ZERO**



# WATER WE GOING TO DO?

WATER IN SCOTLAND IS OUR MOST PRECIOUS COMMODITY, AND WE ARE DOING WHAT WE CAN TO SAVE AND RE-USE AS MUCH AS POSSIBLE.

Our waste water treatment plant processes over 150million litres of water per year which can be recycled back to our brewery. This is an outstanding improvement and will have a long-term, substantial effect on our water usage. But, for a craft brewery with an eclectic roster of beers and a passion for creating exciting new beers every year, managing the quality of the recycled water is a big ask. So we invested further...

Reverse Osmosis is a process that removes heavy contaminants using membrane filters and high pressures. This technology can help get us to a more reliable water specification than waste water treatment alone, to ensure every BrewDog beer is made using the best quality water possible.

By the end of 2023, we hope to be re-using water in our process, and by 2024 we hope to be reusing 100% of our recycled waste water meaning our consumption will reduce by over 30% across the BrewDog campus and save a further 70 tCO<sub>2</sub>e emissions.



2022

1,300 MWH  
GAS  
GENERATED

CO<sub>2</sub> EQUIVALENT  
72 TONNES

GREEN GAS CERTS  
397 MWH

SOLAR  
GENERATION\*  
4,097 KWH

2023 H1

2,500 MWH  
GAS  
GENERATED

CO<sub>2</sub> EQUIVALENT  
400 TONNES

GREEN GAS CERTS  
1,392 MWH

SOLAR  
GENERATION  
3,607 KWH

\*Data June – December 2022 only

# OPERATION- SUSTAINABILITY



## BIOGAS TRUCKS

Our two very own CNG or Biogas trucks have travelled over 13,500 km, saving over 7,300 kgCO<sub>2</sub>e. They have been moving lightweight cans on extra-long trailers to get the most mileage and most efficiency out of our brand new branded trucks.

Oh, any they'll be running on gas made from our very own Biogas facility by the end of the year.



## GREEN ENERGY

Our investment in wind power has reduced our emissions by more than 3,200 tCO<sub>2</sub>e across all sites. We recently changed supplier for all sites where we own our own energy contracts, and negotiated 100% wind supplied renewable energy as part of this move.



## HOPHUB

Our distribution warehouse is soon to be solar powered, generating enough electricity to reduce our consumption by half!



## GREEN GAS

By using our spent grains, our partners can fuel their very own AD plant providing BrewDog with green gas certificates to reduce our gas impact.

## OUR 2022 MASSIVE INVESTMENTS INCLUDE

AMMONIA CHILLER

500HL BREWHOUSE

NEW CAN LINE

**BENEFITS TO BE SEEN IN 2023 NUMBERS!**

# KEY MILESTONES

TRANSPORT REDUCTION OF

6%\*

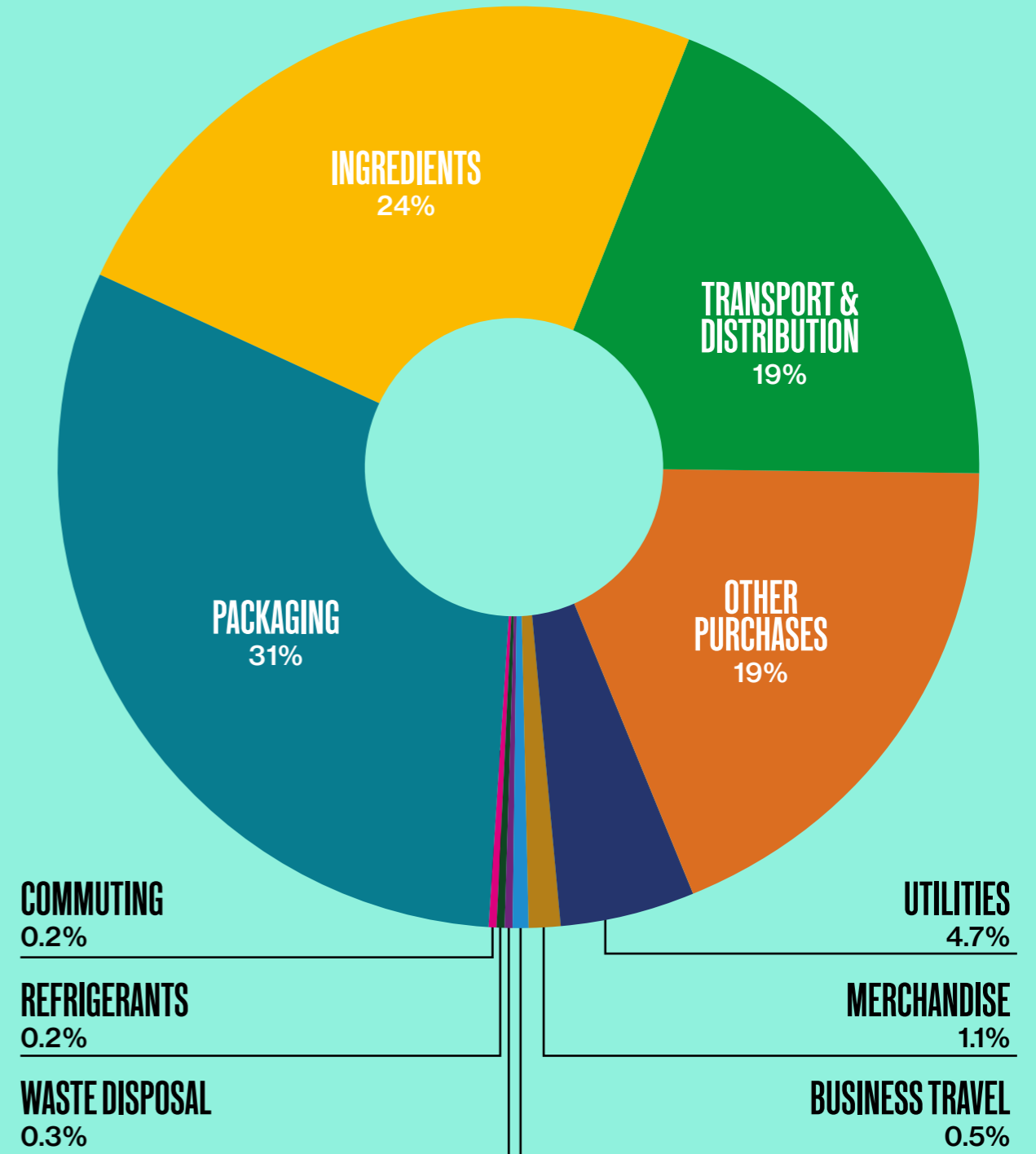
GLASS BOTTLE REDUCTION OF

14%\*\*

CO<sub>2</sub> USE DOWN BY

16%

# OUR SCOPE 3 BREAKDOWN



Throughout the past few years, we have made some great progress in reducing transport emissions by improving efficiency with our logistics partners and introducing biogas trucks. We have also moved various suppliers north of the border to reduce miles travelled.

We worked closely with our ecommerce 3PL company to reduce packaging inserts to significantly reduce cardboard use for online purchases, and investment in UK Barley means we are committing to a greener and more sustainable agricultural supply chain.

We've taken huge strides in operational efficiency to reduce our CO<sub>2</sub> consumption whilst we wait for our full CO<sub>2</sub> capture and re-use plant.

BrewDog's capital projects in 2021 and 2022 have had significant impact on Scope 3 numbers, which offsets some of the progress made elsewhere in the business, but which will have a long-term positive impact on emissions and sustainability.

# UK RETAIL FOOTPRINT

Our reporting transparency in food purchases has greatly increased thanks to work with our food partner, Brakes, enabling us to monitor food purchases and therefore measure carbon with greater confidence.

We now have the most accuracy we've ever seen, and a full year of trading for our Bars to fully open the hospitality industry's eyes to a post-Covid carbon footprint.

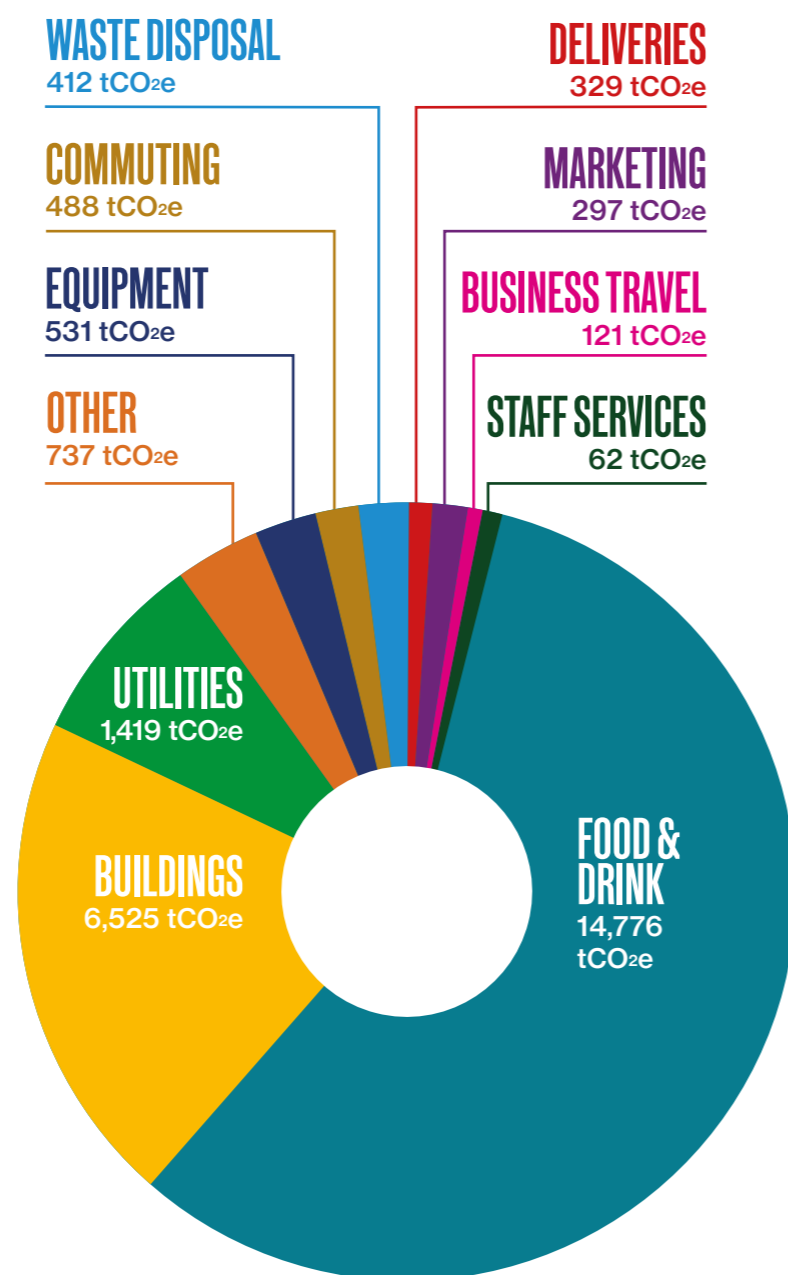
With the cost of third-party goods (such as guest beer in our bars) rising above inflation, our overall emissions per revenue metric has increased. In addition we also worked tirelessly to build and fit out our jaw-dropping flagship bar at Waterloo Station in London which opened in late August 2022 – a large capital investment which affected our emissions metric for 2022.

## THE BREAKDOWN

2022 METRIC  
**0.37kgCO<sub>2</sub>e/£**

UK RETAIL 2022  
EMISSIONS TOTAL (tCO<sub>2</sub>e)  
**25,725**

UK RETAIL 2022  
EMISSIONS TOTAL (tCO<sub>2</sub>e)  
MINUS BREWD OG BEERS  
**22,805**



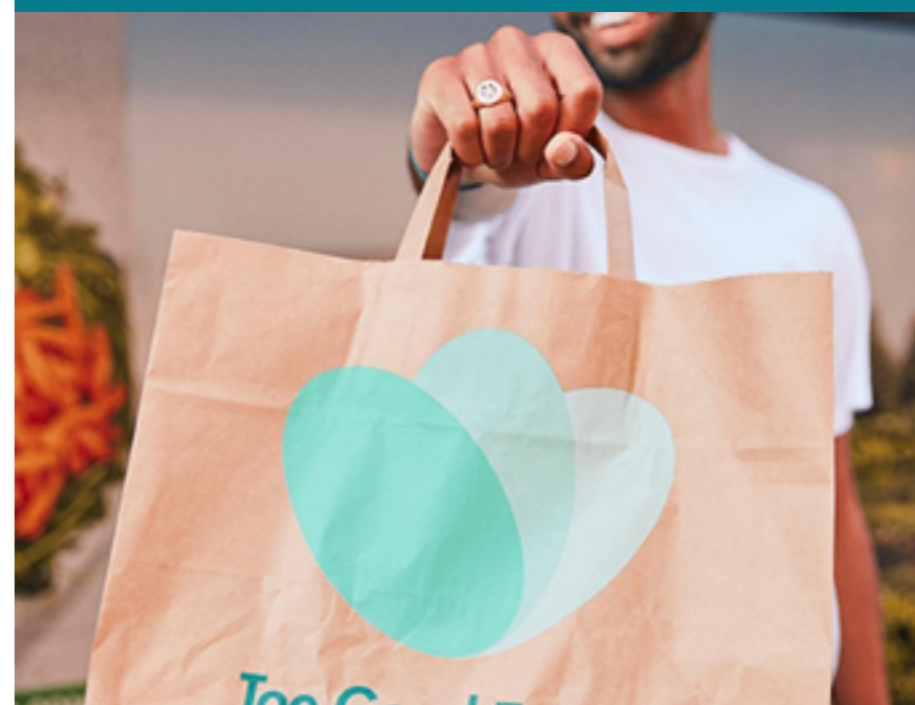
### SUSTAINABLE BAR BUILDS

In 2022 we were thrilled to achieve a Very Good score from the BREEAM code for sustainable built environment. This recognises our focus and attention to sustainable practices and choices when fitting out our new, landmark venue in Waterloo, London.



### VEGAN MENU

Our menus in BrewDog bars are 50% (or more) vegan and vegetarian options, and our #1 best selling dish across all BrewDog Retail venues is our vegan Buffalo Cauliflower 'wings'!



### ENERGY TIMERS

We've installed energy timers on all our equipment that is in continuous use, such as refrigerators and small kitchen equipment. This ensures that they are turned off when not in use, or when optimal efficiency is achieved, reducing our energy consumption overall.

### TOO GOOD TO GO

We partnered with Too Good To Go to prevent our short-date beers going to waste!

### MEATLESS MONDAYS

Every Monday, worldwide in all our bars, we offer 2-for-1 on all plant-based menu items! This initiative has been really well received, with many people making the switch to lower carbon options.



# LOST FOREST

UNDER CONSTRUCTION UNDER CONSTRUCTION  
APPROVED CONSTRUCTION

OUR 9,308 ACRE SITE IN BEAUTIFUL AVIEMORE IS WELL ON ITS WAY TO BECOMING ONE OF THE FASTEST AFFORESTATION PROJECTS IN EUROPE. WE'VE PASSED ALL REGULATORY MILESTONES, & HAVE PLANTED OVER HALF A MILLION TREES ALREADY.

Our carbon is our problem, and reducing our emissions as far as possible is our #1 priority. But our Lost Forest project adds a further benefit to our community as we look to plant 1 million trees and restore acres of peatland in this stunning site in Scotland.

Our Equity Punks were on the ground helping us plant the first saplings in 2022, and we welcomed them back this summer for a closer look at our tree-planting initiatives.

# LOST FOREST

RECLAIMING THE STUNNING SCOTTISH LANDSCAPE FOR FUTURE GENERATIONS IS AT THE HEART OF OUR DECISION TO ACQUIRE LAND IN AVIEMORE FOR REFORESTATION AND PEATLAND RESTORATION. WORK HAS BEEN PROGRESSING REALLY WELL.



## WOODLAND CREATION

Following the extensive survey and consultation work completed over the past two years, an afforestation scheme was designed specifically for the 9,308 acres of land we have acquired in Aviemore. This was split into two phases for implementation, and the planting, natural regeneration and maintenance will take many years to implement.

Phase one was approved by Scottish Forestry in June 2022. This was for a total of 426ha of new woodland creation, including 102ha through natural regeneration.

Tree planting commenced on schedule in March 2023 and at the time of going to press, over 500,000 trees had been planted in the Lost Forest. A minimum of 40,850 trees are to be established by natural regeneration, although we expect this figure to be higher as the afforestation projects develops.

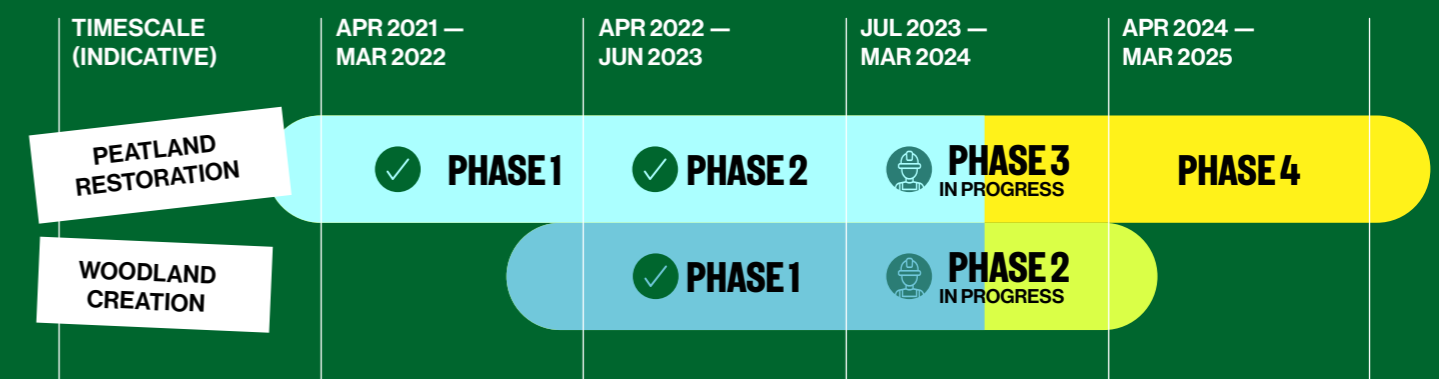
The areas identified for new woodland through natural regeneration have been based on soil types and proximity to potential seed source.

Phase two was submitted to Scottish Forestry in February 2023, and works commenced Summer 2023, after completion of Phase one. This is a total of 434ha of new woodland creation, including 34ha through natural regeneration. The natural regeneration component is smaller, as the existing trees are more sparse. The initial planting work will be split over two years to be completed Spring 2025.

## PEATLAND RESTORATION

Peatland restoration commenced in Autumn 2021, and work has been hitting all target dates so far.

190ha of peatland restoration has been completed to date, and over the next 2-3 years there is a further 300ha of potential peatland to restore, all of which will effectively sequester carbon from our atmosphere.



Our projects will be registered on the UK Land Carbon Registry. Jointly they are estimated to sequester 308,122 t CO<sub>2</sub>e (Woodland Pending Issuance Units in total over 100-year period).

**POSITIVE**

**PLANET**



In 2022, we achieved the Positive Planet carbon negative accreditation as a testament to our reduction in emissions and carbon removals for the emissions we're unable to avoid. This accreditation is only granted after rigorous verification of our emissions data, as well as evidenced proof of purchase for our carbon removals activity.

Since being granted the accreditation, we have applied the badge to our packaging enabling our customers to confirm with confidence that our environmental credentials are third-party verified.

We recognise that, unfortunately, greenwashing is becoming more common in some industries, and we understand the negative effects this can have on influencing climate change. We work closely with Professor Mike Berners-Lee and his team at Small World Consulting to ensure the deepest most granular and effective work is done to analyse and report on our emissions. But we also recognise the importance of validating our findings with a third party, to bring full transparency to our claims.







# BREWDOG IS CARBON NEGATIVE

ALONGSIDE OUR AFFORESTATION WORK AT OUR LOST FOREST PROJECT IN SCOTLAND, WE CONTINUE TO WORK WITH PARTNERS AND PROJECTS WHICH HAVE THE HIGHEST STANDARD OF ACCREDITATION ON CARBON REMOVALS. ALL PROJECTS HAVE BEEN ADDITIONALLY VETTED BY THE TEAM AT SMALL WORLD CONSULTING FOR THEIR WIDER ENVIRONMENTAL AND HUMAN BENEFITS, AND WE CONTINUE TO SUPPORT REMOVALS FOR MORE CARBON THAN WE EMIT.



This is not only a part of our sustainability strategy, and is core to our belief that businesses cannot achieve reduced emissions overnight and must work to recover emissions elsewhere in the meantime, but it is also a requirement of the Positive Planet accreditation we achieved in 2022. We're proud to be aiming for a second year's certification.

# SUSTAINABLE GLOBAL GARDENS

In 2022 we donated a portion of the profits from our POP Soda to Sustainable Global Gardens, supporting tropical tree-planting. Around 25,000 trees are expected to be planted as a result of our donation, including multiple indigenous trees, saplings, fruits, and bamboo stems in Kenya.



# BLUEPRINT



THE SUNDAY TIMES  
**T Best Places to Work 2023**



We recently released our latest Blueprint, detailing all the latest initiatives from across our business from brewing to distilling, retail to people, planet and beyond. Two stand-out announcements in this release included our appearance in the esteemed Sunday Times 'Best Places to Work' list, acknowledging our raft of benefits and career opportunities for our crew, as well as our 'Top Employer' accreditation, a showcase of our dedication to a better world of work, proven via our exemplary HR policies and people practises.

We also unveiled our new-look BrewDog board of directors, with Chair Allan Leighton joining in 2021 and Giny Boer taking a seat as Non-Executive Director in 2023. Giny's contribution will enable our directors to access ideas and approaches from other industries, as well as strengthening the overall make up of the board.



# A FORCE FOR GOOD

## MENOPAUSE ACCREDITATION

By the end of 2023, we will be an accredited menopause-friendly employer. We're working towards long-term sustainable changes that foster an inclusive culture where everybody can be their best, true selves.



## MENTAL HEALTH FIRST AIDERS

We have trained over 200 people across our business to become accredited Mental Health First Aiders (MHFA). The result is that there is always an available contact point for anyone in need of mental health support and signposting, and our bar teams have extra training for supporting any customers who may show signs of needing support with their mental health. These staff are safeguarded through risk assessments, monthly meetings, refresher sessions and wellbeing labs, and we recognise their work through a monthly payment added to their paycheque.



## I AM WHOLE

We launched the SAD AF and I AM WHOLE beers with our charity partner to get more people talking about mental health. It's an incredibly important topic, and beer is an excellent lubricant for conversation. The alcohol-free beers launched with a spoken-word piece by Rizzle Kicks' Jordan Stephens.



## NEURODIVERSITY

We are aware that the assessment journey and diagnosis for many neurodiverse conditions can be long and difficult, so we have begun offering a fully funded referral, screening and assessment with an external clinical partner for ADHD and/or Autism diagnosis, for any staff who have been on an NHS waiting list for six months or more.

## EMPLOYEE REPRESENTATION GROUP

Our people are central to our strategy, being one of the three pillars of our business. As such, we commit to including their voice in major business decisions that will impact them. Our Employee Representation Group (ERG) meets every quarter, and they are consulted on upcoming changes and concepts that might impact their colleagues. Their feedback is then shared with senior teams to influence the path forward, and we have made significant changes to our plans as a result of their comments. Nominated team members are also able to field requests from the teams they represent to raise further questions and discussion topics at the regular ERG meetings. Listening to our teams who are the front line of our business has always been critical to the success of BrewDog, and the ERG is enabling us to reach all corners of the company as we grow.



## ETHICAL MARKETING POLICY

We recently codified our ethical marketing approach in a formal policy document, proving our commitment to fair and honest communications as a brand.

## BREWDOG ELLON

It's important to us that we engage with and support our local community. We continue to hire roles in Ellon, where our headquarters are based, and recently hosted a local college on site for a full introduction to our production & quality operations.

We contribute to local charity initiatives, donate to local foodbanks, organise gift giving at Christmas for 'Befriend a child' locally, and we now host local market days at DogTap for small, independent businesses. We're proud of our community and honoured to do what we can to support them.



# THE SCIENCE BIT.

## THE METHODOLOGY

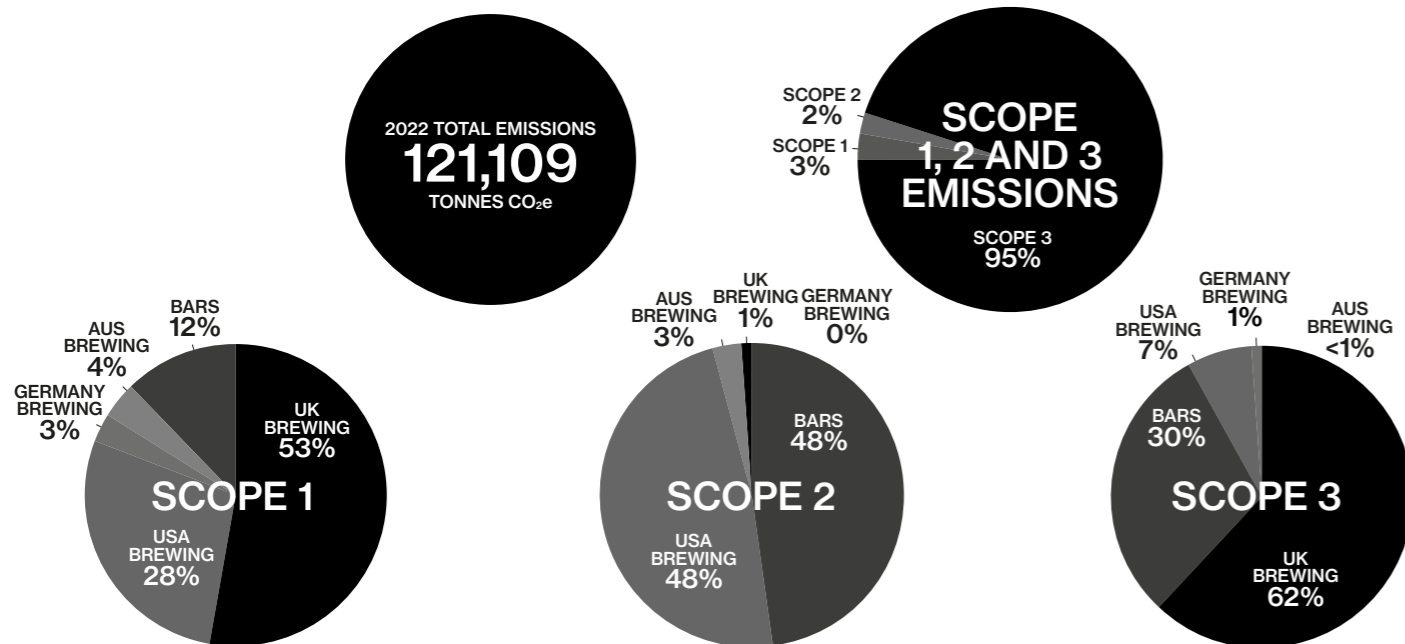
Any carbon footprint analysis is based on a number of best estimates and this is not an exact science. We have worked with Professor Mike Berners-Lee and his team at Small World Consulting to put these numbers together and we will regularly update and refine these numbers and share the latest estimates in each edition of our sustainability report. When we count carbon, we count all of it. This means we also include all of the carbon in our supply chain too.

We steadfastly believe this is the only real way to count carbon and calculate our true impact. We have also broken our business down into the following categories:

- UK Brewing (includes BrewDog Distilling)
- USA Brewing
- Germany Brewing
- Australia Brewing
- BrewDog Bars (includes all bars worldwide, excluding franchises)

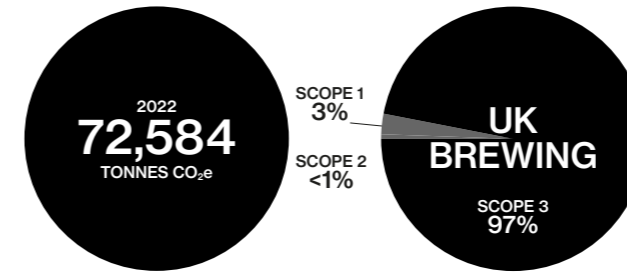
## BREWDOG'S 2022 CARBON FOOTPRINT

BUSINESS UNIT	2022 HL OUTPUT	SCOPE 1	SCOPE 2	SCOPE 3	TOTAL
UK Brewing	866,175	2,098	37	70,450	72,584
US Brewing	64,767	1,105	1,365	7,350	9,819
German Brewing	18,022	137	-	1,476	1,613
Australian Brewing	4,236	142	90	340	572
BrewDog Bars	n/a	458	1,372	34,691	36,521
<b>TOTAL (TCO<sub>2</sub>e)</b>		<b>3,940</b>	<b>2,864</b>	<b>114,305</b>	<b>121,109</b>



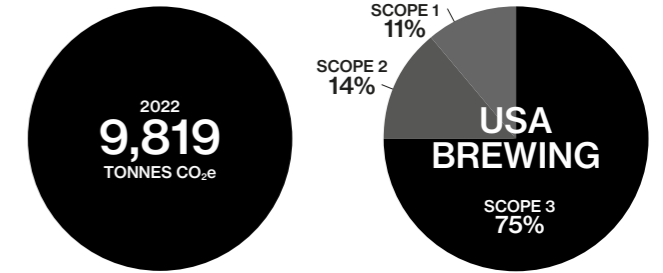
## UK BREWING

Scope 1 & 2: 2,135 tonnes CO<sub>2</sub>e  
Scope 3: 70,450 tonnes CO<sub>2</sub>e



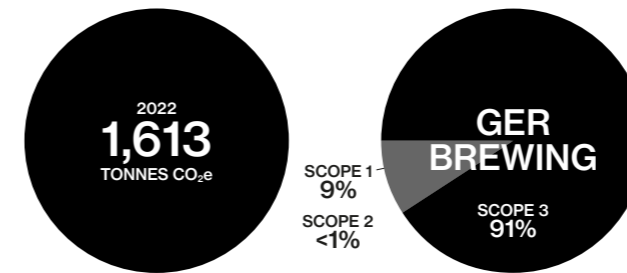
## USA BREWING

Scope 1 & 2: 2,470 tonnes CO<sub>2</sub>e  
Scope 3: 7,350 tonnes CO<sub>2</sub>e



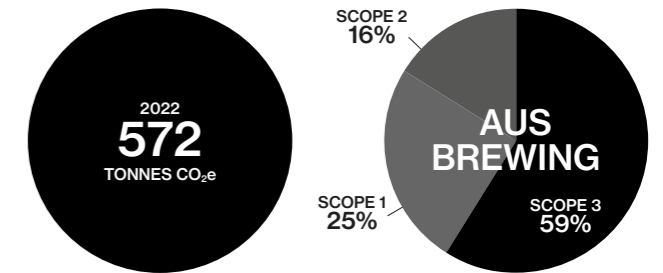
## GERMANY BREWING

Scope 1 & 2: 137 tonnes CO<sub>2</sub>e  
Scope 3: 1,476 tonnes CO<sub>2</sub>e



## AUSTRALIA BREWING

Scope 1 & 2: 232 tonnes CO<sub>2</sub>e  
Scope 3: 340 tonnes CO<sub>2</sub>e



## BREWDOG BARS

We have over 115 global retail locations

Scope 1 & 2: 1,830 tonnes CO<sub>2</sub>e  
Scope 3: 34,691 tonnes CO<sub>2</sub>e



## CARBON CREDITS

With our finalised numbers for 2022, our total impact was 121,109 tCO<sub>2</sub>e globally. This means that we will have retired over 130,000 carbon credits from the Nature Conservancy Canada's Darkwoods Project in 2023 to ensure we have removed more carbon from the atmosphere than we have emitted.

## GLOSSARY

**SCOPE 1**  
Direct emissions from company owned vehicles and facilities, including fuel combustion and emission leaks.

**SCOPE 2**  
Indirect emissions from purchased electricity, heat, steam and cooling.

**SCOPE 3 (UPSTREAM)**  
Indirect emissions throughout supply chains of business activities and purchases.



**PEOPLE  
PLANET  
BEER**

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