

MAKE EARTH GREAT AGAIN



SUSTAINABILITY REPORT #4

BREWDOG'S PUNKED-UP-PLAN

FOR BETTER BEER. FOR A BETTER PLANET. POWERED BY THE PEOPLE. FOR US ALL.

AN EVOLVED MISSION

Our intentions as a business remain as resolute as they did when we started brewing Punk IPA 15 years ago; to make other people as passionate about great craft beer as we are. But the reasons why we do it, and the things that matter in our world (beyond making great beer), have changed.

We've always recognised that business should be a force for good, and in 2020, we set out to establish a new standard for the potential good we can do.

THE WORLD IS IN CRISIS

And it is up to all of us, to prevent cataclysmic damage to planet Earth.



THERE ARE NO NON-RADICAL SOLUTIONS LEFT.

Governments the world over are failing to mobilise corporations to make the life-dependent changes needed to prevent complete destruction caused by climate change. It is down to us, and everyone who drinks our beer, to make the change we so desperately need.

ACTIONS NOT PROMISES.

In 2020, we established a new 'Tomorrow Charter' for our future. The fundamental reason for our existence remains intact; we're committing to making great beer, and ensuring we have a planet to drink it on.

MAKING EARTH GREAT AGAIN.

#1. REDUCING EMISSIONS

We have reduced our electricity use by 43%, and water consumption by 55%*. But we're not stopping there. We are also planning to achieve net zero production emissions from our Ellon facility by 2023.

#2. BIOENERGY PLANT

This £12m investment in our Ellon facility will see us convert our brewing waste into bioenergy that we can use to power our brewery, fuel vehicles, feed excess gas back to the grid and cut our water consumption by a third!

#3. THE LOST FOREST

9,308 acres of Scottish Highlands. We aim to plant over 1.1m native trees and restore peatland to avoid significant volumes of CO_{2e} being released into the atmosphere. There'll also be opportunities to visit, camp, hike and explore.

#4. ELECTRIC VEHICLES

We are working on introducing electric trucks to our fleet wherever possible, and working with our distribution partners to use our green biomethane to power these vehicles too!

#5. EVERY DAY IS EARTH DAY

We are working to embed sustainability into our business, and every team member strives to reduce emissions. From prioritising vegan and vegetarian dishes in our bars, to heightened standards for our supply chain, everything we do has Earth's interests at heart

[BREWDOG.COM/TOMORROW](https://www.brewdog.com/tomorrow)

CAN HUMANS WAKE UP IN TIME? THAT'S THE BIG CLIMATE QUESTION.

The science couldn't be clearer. Since the last MEGA report, the world has held yet another big climate conference - COP 26 was the latest international attempt to get some global action. But the reality is that nothing so far has brought about the change we need, and COP 26 didn't deliver either. To be frank, the world is awash with talk, greenwashing and wishful thinking. The billions of good intentions have so far been outmanoeuvred by those who either don't want to see change, don't care about it enough to let it get in the way of their careers and profits, or just don't have the imagination to see how things could be different.

The solutions are here. So what will it take, and where does BrewDog fit in?

Two of the most critical ingredients for change are honesty, and respect for all people. We need much more of these qualities throughout politics and business. Ukraine shows us what can happen when these things are missing.

These days I spend more and more of my time trying to call out the ever-more sophisticated greenwash from corporations and trying to help companies develop serious, coherent and honest responses. That's why I work with BrewDog.

We collaborate closely to make sure that what they are doing is not just technically honest, but creates an accurate impression. BrewDog is a lot better than most companies at saying it like it is, and taking the kind of action that is needed. The recent action on profit sharing with all bar staff is an inspiring example of respect for a work force.

Finally, in terms of the action that the world so badly needs, BrewDog has been working on almost every aspect of the business, including the supply chain, to cut the carbon per litre of beer at an impressive rate. You'll read in this report about investments to cut waste, generate energy, shift to better packaging and much more.

Alongside the climate crisis we also face the increasing threat of wider ecological breakdown. That's why it is so important that BrewDog's work in the Lost Forest stands to be an exemplar of the sensitive land management that we need to start seeing everywhere. Plus, while The Lost Forest project gets underway, the money BrewDog puts towards nature-based carbon removals goes to projects that we have vetted extremely carefully for their wider social and environmental responsibility.

Nobody is perfect. There are huge challenges ahead. Ingredients come from a broken global food system, most transport still uses fossil fuels, and even recyclable cans have an impact. More mistakes will be made, and more will have to be learned along the way.

**That is the only way to make the radical changes we need.
But together, we can make great change.**

Mike Berners-Lee
Lead Scientific Advisor



BREWDOG IS A LOT BETTER THAN MOST COMPANIES AT SAYING IT LIKE IT IS, AND TAKING THE KIND OF ACTION THAT IS NEEDED.

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



"EMPTY PLEDGES PUT US
FIRMLY ON TRACK TOWARDS AN
UNLIVEABLE WORLD. WE ARE ON A
FAST TRACK TO CLIMATE DISASTER"

UN SECRETARY GENERAL,
APRIL 2022

IN 2022, THE IPCC DETERMINED THAT UNPRECEDENTED CHANGES
TO THE CLIMATE HAVE ALREADY AFFECTED ALL FORMS OF LIFE.
IT IS ALREADY TOO LATE.

IN ORDER TO AVOID COMPLETE CLIMATE CATASTROPHE,
WE MUST LIMIT WARMING TO 1.5°C. BUT WE ARE ON TRACK
TO INCREASE GLOBAL TEMPERATURES BY DOUBLE THAT.

REDUCTION OF EMISSIONS MUST BE THE PRIORITY FOR NATIONS,
CORPORATIONS AND INDIVIDUALS IF WE ARE TO ACHIEVE OUR TARGET.

BREWDOG IS ALL IN TO MAKE EARTH GREAT AGAIN. FAST.

BREWDOG

A NOTE FROM BREWDOG'S CAPTAIN

Dear people of the world

ENTERING OUR 15TH YEAR, WE FIND OURSELVES FACING EVER INCREASING CHALLENGES, NOT JUST AS A BUSINESS IN AN (ALMOST) POST-PANDEMIC WORLD, BUT ALSO AS WE STRIVE TO BATTLE INEVITABLE CLIMATE CHANGE.

The reality is, unfortunately, bleak. But as a company, we are fully focused on leaving the world in a better place than we found it. It shall be our legacy to relieve the planet of the damages that many of our peers in industry and government are blindly accepting.

REDUCING EMISSIONS HAS ALWAYS BEEN AND CONTINUES TO BE THE MOST IMPORTANT PRIORITY FOR US.

Emissions are our problem, and ours alone. We are striving to cut our carbon, and we're making significant investment this year to do just that.

At our Ellon HQ our on-site bioenergy plant will recycle our used water whilst generating bio-methane to power our system; this £12m investment is due to be fully operational in the 3rd quarter of 2022. It will significantly reduce our carbon footprint as well as drastically minimise our water usage.

As part of this project, we are also installing compressors which will enable trucks carrying our beer south of the brewery to be powered by bio-methane generated from our waste. A CO₂ recovery system is also in the works in Ellon, which will capture the CO₂ produced by fermentation for use downstream to carbonate our beers.

In parallel to our emissions-cutting actions, our Lost Forest project is on schedule, and we were thrilled to receive the necessary planning permissions in June 2022. This vital step allows us to commence our tree-planting activity, which should start in November once we have concluded our ground prep.

IN 2022, WE ARE MAKING THE MOST SIGNIFICANT
INVESTMENTS WE HAVE EVER MADE IN OUR FUTURE.
WE HAVE BOLD AMBITIONS AS A BUSINESS, AND AS
RESIDENTS OF PLANET EARTH.

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% CO₂e/HL
REDUCTION*
BY 2023 COMPARED
TO OUR 2019
BASELINE!**

*CO₂e, "carbon dioxide equivalent", covers all the greenhouse gases.

HOW WE DID IN 2021

"BEER ISN'T ABOUT A SPECIFIC DEMOGRAPHIC, IT'S NOT ABOUT A TREND OR A FAD, IT'S ABOUT PEOPLE ENJOYING A BIT OF TIME WITH THEMSELVES OR WITH FRIENDS!"

MARTIN DICKIE



Our carbon footprint accounting year runs from January – December.

If you've spotted a change to last year's report, you're right!

And here's why...

A NOTE ON OUR METHODOLOGY

We are continually evolving our carbon footprinting methodology as we engage with our suppliers, improve our data management systems, and as the science evolves. We have to apply our latest methodology to our baseline year, causing us to adjust the estimate from the original one we made in 2019, but this is important as it allows us to compare footprints year on year.

We have improved our accuracy in key areas over the past two years.

Here are the key changes:

ONE

We have improved the accuracy of our estimate of the footprint of our retail operations (bars) through improved data collection systems. We now present this footprint separately from our brewery baseline, hence the amended footprint per HL. This will allow us to devise appropriate and relevant carbon management plans for both brewery and retail separately.

TWO

We have improved our estimate of our international operations as this is an area of growing importance. We will be looking to improve this further in future analyses.

THREE

We are improving our estimate of UK brewery operations through improved data collection and engagement with our suppliers on their own carbon footprint

CO₂e IMPACT OF OUR BREWERIES

2019

101.8 kg

CO₂e / HL

2020

88.0 kg

CO₂e / HL

2021

86.6 kg

CO₂e / HL

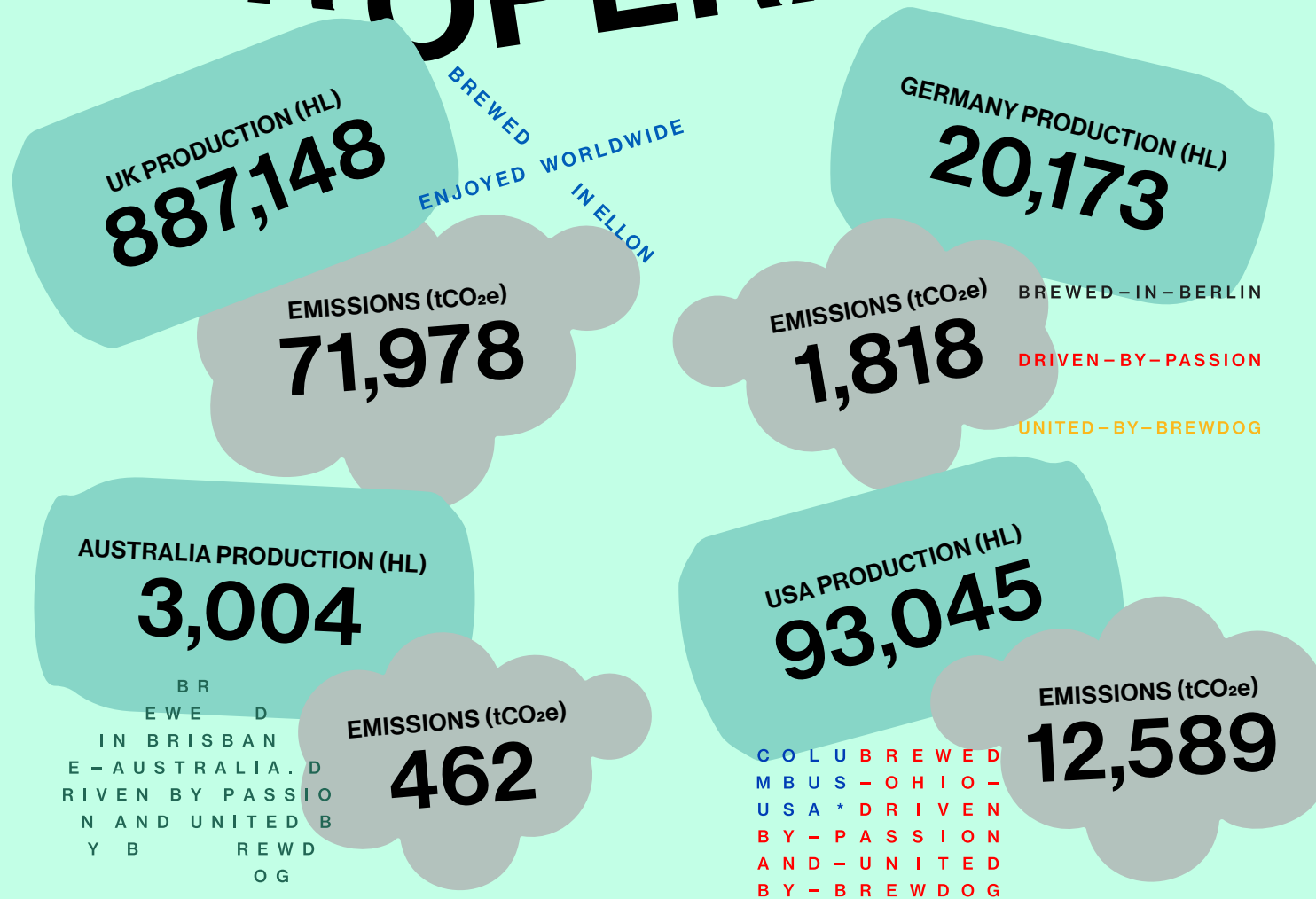
BY 2023

66.2 kg

CO₂e / HL

Our results for 2022 will be released in our MEGA report issued in summer, 2023!

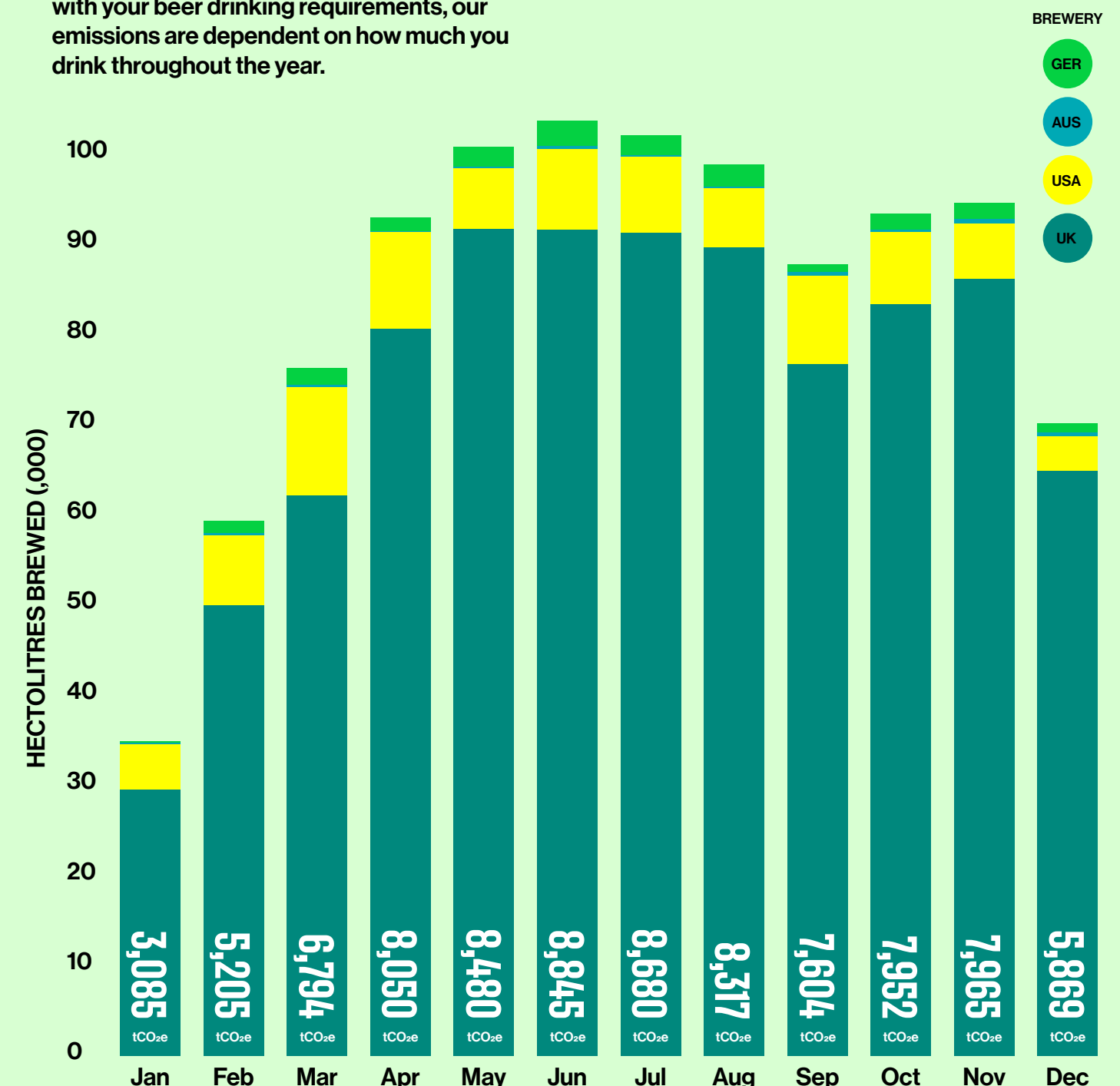
EMISSIONS IN OUR OPERATIONS



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


The metric we use to present our carbon impact can be applied for any bar, any customer or any consumer to measure the direct impact. If you drink 1HL of our beer (equal to 300 cans of Punk!) that equates to 86.6 kgCO₂e, but that also means those emissions are avoided, since that amount of carbon is eliminated through our Darkwoods conservation project!

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.




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!


IN THE PAST FIVE YEARS FROM 2016 TO 2021, WE HAVE...

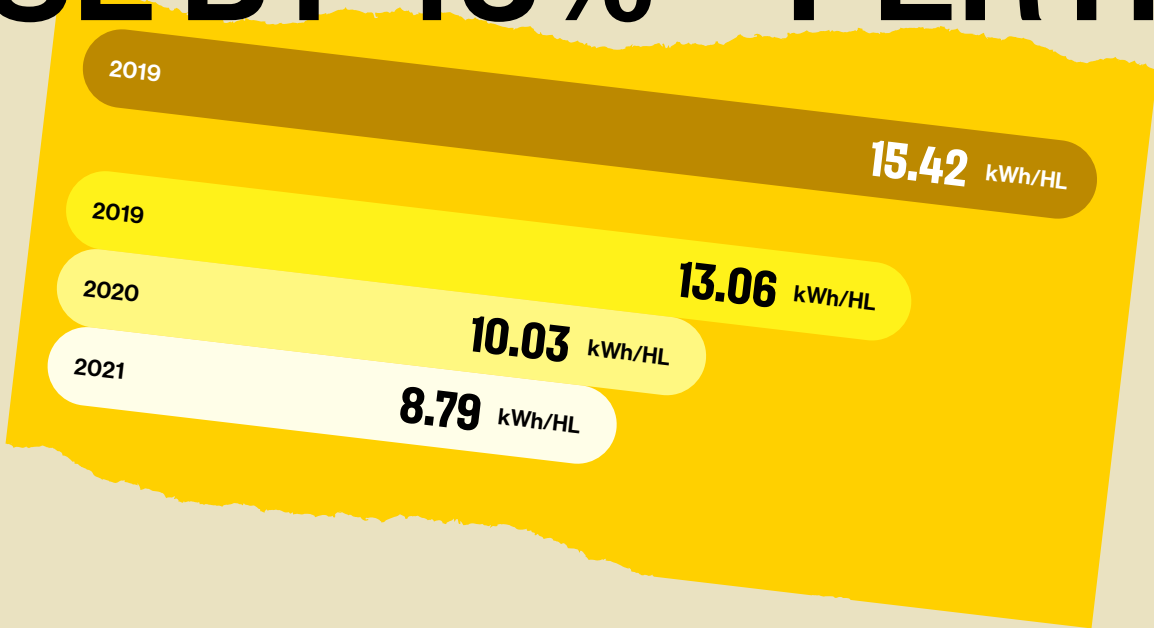
CUT  WATER USAGE BY 55% PER HL



DECREASED NATURAL  GAS USE BY 46%* PER HL



CURBED ELECTRICITY  USE BY 43%** PER HL



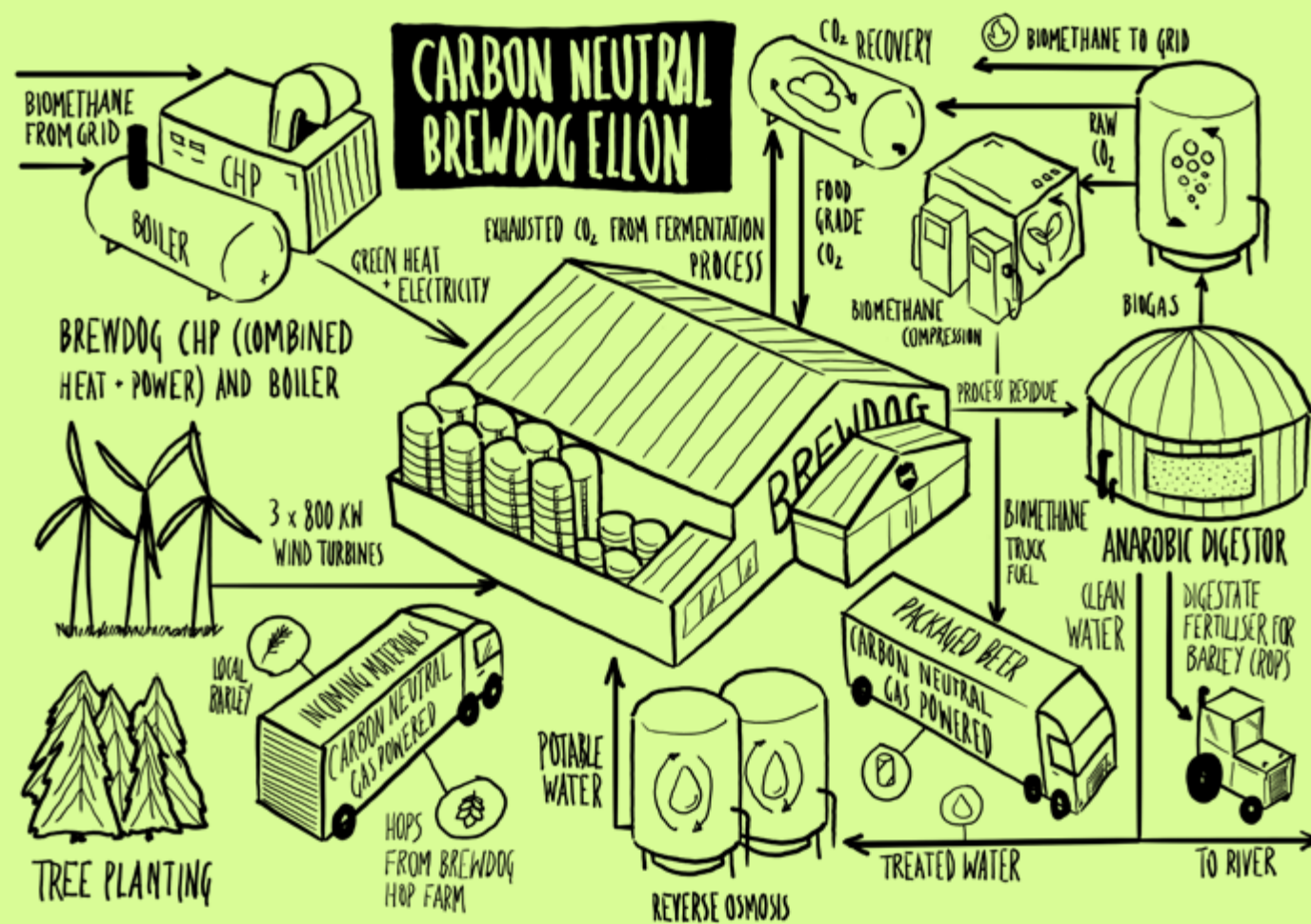
*Soon to be using our own **Now using 100% renewable electricity

**WE ARE
INVESTING
NEARLY £50M
TO REDUCE
OUR IMPACT**

**AT BREWDOG HQ
WE HAVE INITIATED
MULTIPLE NEW
PROJECTS WHICH
WILL REMOVE
HUGE VOLUMES
OF CO₂ FROM
OUR EMISSIONS
TO HELP US
REACH OUR 35%
REDUCTION
TARGET**

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

**WITH AN AMBITIOUS RANGE OF PLANS,
WE INVESTED HEAVILY IN THE HEART
OF OUR BUSINESS TO MASSIVELY REDUCE
OUR IMPACT ON THE PLANET.
HERE IS AN UPDATE ON THOSE KEY PROJECTS:**



**24 MONTHS
TO ZERO**

**In February 2022 we
achieved gas to grid for
the first time**

**Our Biogas compression
facility is due for delivery in
September 2022**

**In September 2022 our
compressed natural
gas-powered trucks will
be on the road**

**CO₂ recovery is planned
for the end of 2022**



**Reverse osmosis is on
track for the end of 2022**



BREWDOG BIO-ENERGY

A FULLY INTEGRATED SOLUTION AND TRUE CIRCULARITY!

The BrewDog Bio-Energy Plant will significantly reduce our local environmental impact, helping deliver our ambitious 2023 zero-emissions brewery target.

THIS PROCESS...

- Converts unwanted liquid residues into on-site bio-energy
- Reduces site emissions from effluent disposal and fossil fuel use
- Meets production requirements within the brewery
- Produces clean HGV fuel, recycled water and green CO₂



PHASE 1 DESIGN

ANNUAL BIOMETHANE PRODUCTION

23,112,482 kWh



PHASE 2 DESIGN

ANNUAL BIOMETHANE PRODUCTION

41,805,523 kWh



Per year unless otherwise stated

2021

THESE ARE JUST SOME OF THE INITIATIVES WE UNDERTOOK IN 2021 TO CREATE LONG-TERM SOLUTIONS TO REDUCING OUR EMISSIONS

RENEWABLE ELECTRICITY



3,040 tCO₂e

SUPPLY CHAIN IMPROVEMENTS

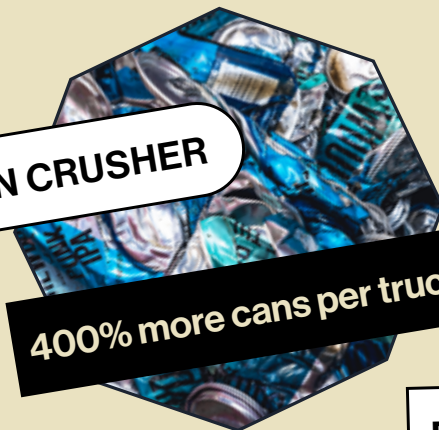
2,083 tCO₂e

VAPOUR HEAT RECOVERY

489 tCO₂e

CAN CRUSHER

400% more cans per truck load



ELECTRIC TRUCK

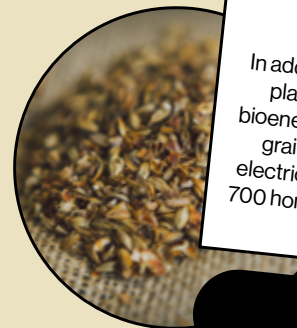
13 tCO₂e



BYE BI-PRODUCTS

In addition to the BrewDog Bioenergy plant, we work with another local bioenergy facility which uses our spent grains to produce green heat and electricity equivalent to powering over 700 homes per year and approximately 1,700 tCO₂e!

1,700 tCO₂e



PROJECTS

2022

EMPLOYEE TRAVEL

We are upgrading our corporate travel suppliers to focus more on sustainable options, and to better calculate the emissions generated by our teams' movements. We have already updated our expenses reports to consider the car and fuel type for teams using cars to get around.

EV SALARY SACRIFICE

Following an epic idea put forward by a member of our crew, we introduced Tusker, which allows our teams to get themselves an awesome new electric or low emissions vehicle via salary sacrifice. This makes it super cost effective to get a more planet-friendly set of wheels!

GLOBAL SOLAR PV

We have already installed a full set of solar panels on the roof of our Australia brewery, making the most of that year-round sunshine! We're currently exploring projects to install a solar panel field on the campus of our US brewery, and on the roof of our HopHub distribution centre in Glasgow.

IT IMPROVEMENTS

We are investing in equipment that now contains up to 85% post-consumer recycled plastic! Materials come from everything from leftover aviation industry materials to new bio-based materials. We're also embracing environmental recycling of old IT equipment which aims to reuse, refurbish and recycle.

SUPPLY CHAIN

We opened Hop Hub2, our HUGE new distribution centre next door to Hop Hub. Suppliers deliver here and our biomethane trucks can shuttle goods to and from HQ! We're also optimising packaging length and pallet sizing as well as truck size, and working with customers to optimise ordering to increase full load deliveries. We're gathering as much data as possible to squeeze down emissions in every corner of our supply chain.

PROJECTS

WHAT'S GOING ON IN ELLON?

FUELLED BY GAS!

We are making huge strides with our logistics partners to reduce our reliance on diesel. Using compressed natural gas from BrewDog's Bio-energy Facility to fuel our new bio-HGVs that shuttle between HQ and HopHub – our state-of-the-art refrigerated distribution centre - we will cover up to 400,000km on clean, carbon neutral fuel! Not only that, but BrewDog's bio-energy facility will also replace over 20 truck journeys per day which previously used to haul waste water off site.



DON'T HOP ME NOW

Our new BrewHouse has the potential to double our production capacity over the next 5 years, massively improving our efficiency. And greater efficiency means lower emissions!



CAN IT

Our new canning line has helped us increase packaging capacity and is by far our longest canning line yet, stretching and weaving its way through the whole packaging floor! Cans are far better for the environment than bottles, and we have made great strides in flipping our packaging mix in favour of planet-friendly cans.



CRUSHING EMISSIONS

Late in 2021 we installed our new can crusher which has reduced truck movements for recycling. This fantastic idea was suggested by a member of our Production team in a global company sustainability initiative to get people thinking about ways to reduce our emissions. A second initiative was kicked off this year to see what new, amazing ideas our crew have to help Planet BrewDog reach its sustainability targets!



RUN WITH THE WIND

Throughout 2021, BrewDog has purchased 100% PPA backed renewable electricity at our Ellon brewery with 90% PPA backed wind energy and 10% REGO backed wind energy throughout our retail portfolio. Choosing REGOs alone is cheap and easy to do but it does little to support local renewable energy. We partnered with a local wind farm "Dorenell" in Aberdeenshire who supply our electricity to the brewery. As we cannot use this in our bars, we still use a standard grid emissions factor for the 10% REGO backed electricity used. We stand firmly against Greenwashing. 2022 is a HUGE challenge for us with energy prices going through the roof but we will continue to support local renewable power.

WE FER-MEANT TO SAY

During the brewing of beer, we must ferment the liquid wort to make delicious beer. This process creates alcohol, but it also creates carbon dioxide.

Food grade CO₂ is extremely important to the business (nobody wants flat beer...!) so getting this right for our new brewhouse involves innovation from across the business and the industry. We are working extremely hard to implement this in 2022!



WE'RE STILL TALKING

The BrewDog distilling co team are nearing completion of their relocation to make way for the brewery expansion! We're getting close to the finish line with this project, and with a commissioning plan now locked, rum will be the very first spirit to flow from the stills. This move enables us to have the space we need for a more efficient brewhouse, while making good use of space we have on campus for our distillery.



RETAIL FOOTPRINT

Since 2019 we calculated the total emissions of our bars based on a detailed analysis of an “average bar”. Now, at BrewDog, we know there’s no such thing as average. So, to improve our accuracy, we have looked at everything purchased throughout 2021 to create a consistent formula which can be used across our global portfolio!

We have removed our own beer from the retail calculations since it’s already counted in our brewery emissions. Our brewery emissions consider the beer’s full journey from ingredients to deliveries to the bars! To keep this consistent, we’ve done the same for 2019 and 2020 and now we can start to compare the performance of our bars going forward year on year!

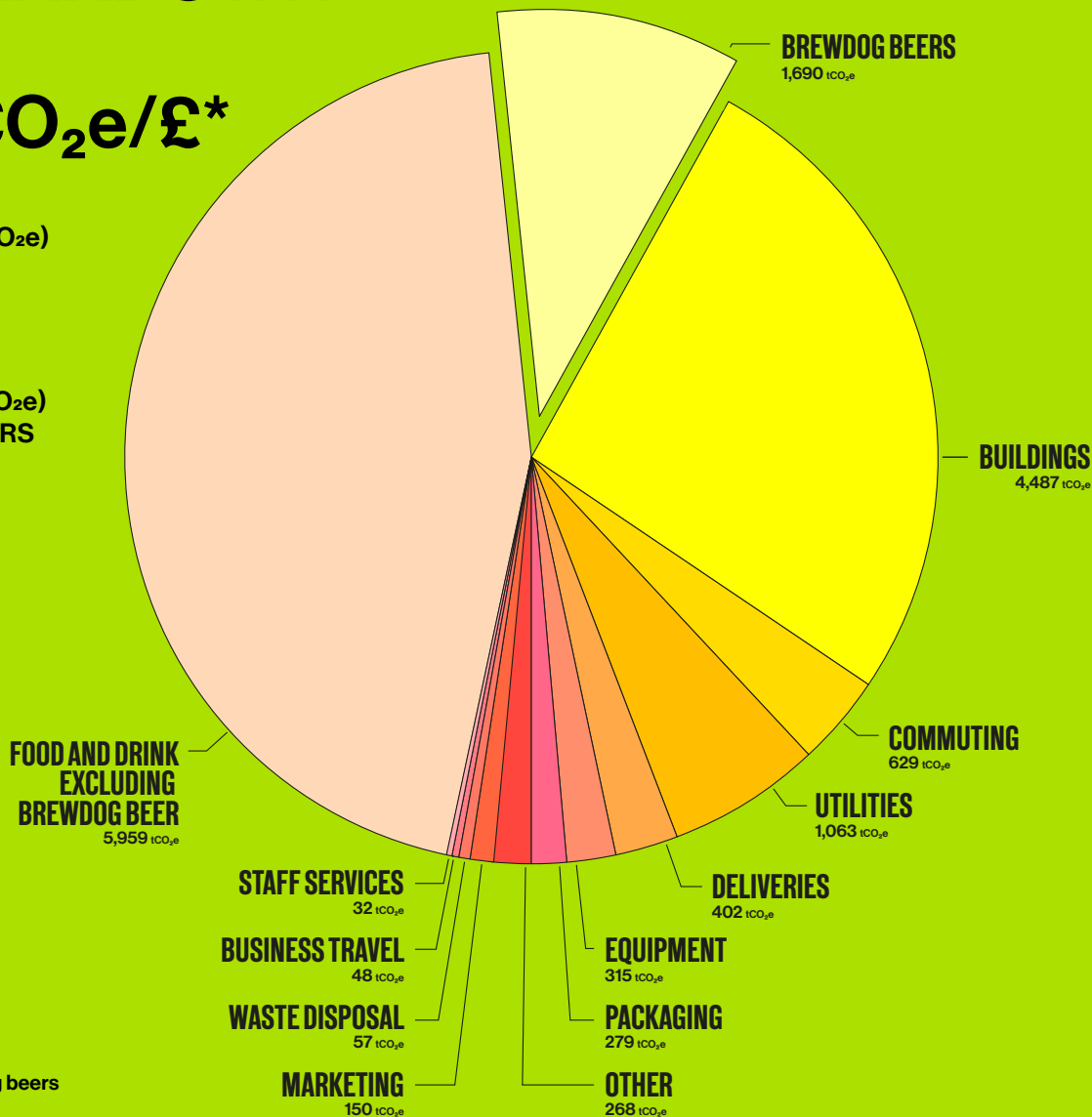
Let’s not forget our bars were impacted for a significant part of 2021 due to Covid lockdowns which has hugely affected our metric.

THE BREAKDOWN

2021 METRIC
0.28 kgCO₂e/£*

UK RETAIL
TOTAL EMISSIONS (tCO₂e)
15,379

UK RETAIL
TOTAL EMISSIONS (tCO₂e)
MINUS BREWDog BEERS
13,689



*Emissions excluding BrewDog beers and against gross revenue

RETAIL ECOBOARD

The ecoboard is our staff initiative made up of eco warriors throughout our Retail business. We have over 70 hospitality venues including bars, pubs, coffee shops and hotels across the UK so our eco warriors have a massive job to do in keeping our spaces as carbon efficient as possible!



EMISSIONS ON OUR MENUS

We represent the amount of carbon we remove from the air for every dish on our menus, allowing our customers to learn about the emissions of their choices, and make informed decisions about what to eat.



KEG WRAP REDUCTION

We've swapped the keg wrap we use to send our kegs back to the brewery from the standard used across our sector, to a thinner but stronger alternative. This means we use less plastic, and it's all 100% recycled too!

RECYCLING

Our aim is to send zero waste to landfill by 2023. In 2022, we achieved the bronze award from First Mile for our recycling efforts across our retail venues, and we are aiming to increase our recycling to 80% in the next year.

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'!



TOO GOOD TO GO

We partnered with Too Good To Go to prevent our short-date beers going to waste! Since implementing, we have saved 12,119 magic bags from being thrown away, avoiding 30 tonnes CO₂e in emissions!

CLEANING PRODUCTS

We now buy our cleaning products from an eco-friendly company, that not only produces chemicals in the UK and to the highest environmental standards meaning they're not so toxic, but also provides them in reusable bottles that are collected and refilled when we finish with them! Bonus – the bottles are also recycled from old milk bottles!



SMART METERS

Our aim is to install smart electricity meters in all BrewDog bars by the end of 2023 so we are fully aware of every single penny spent on energy, and the emissions this creates.

SCOPE 3 EMISSIONS

WE CAN'T DO IT ALONE

WE WORK WITH OUR SUPPLIERS TO FIND THE MOST INNOVATIVE SOLUTIONS TO ALLOW THE FULL SUPPLY CHAIN TO ACHIEVE NET ZERO EMISSIONS.

KEY MILESTONES FOR 2022

Q1

Actively engage top suppliers to understand their emissions reduction journey.

Q2

Create our monthly performance portal and analyse data received from suppliers to identify risks to achieving reduction targets.

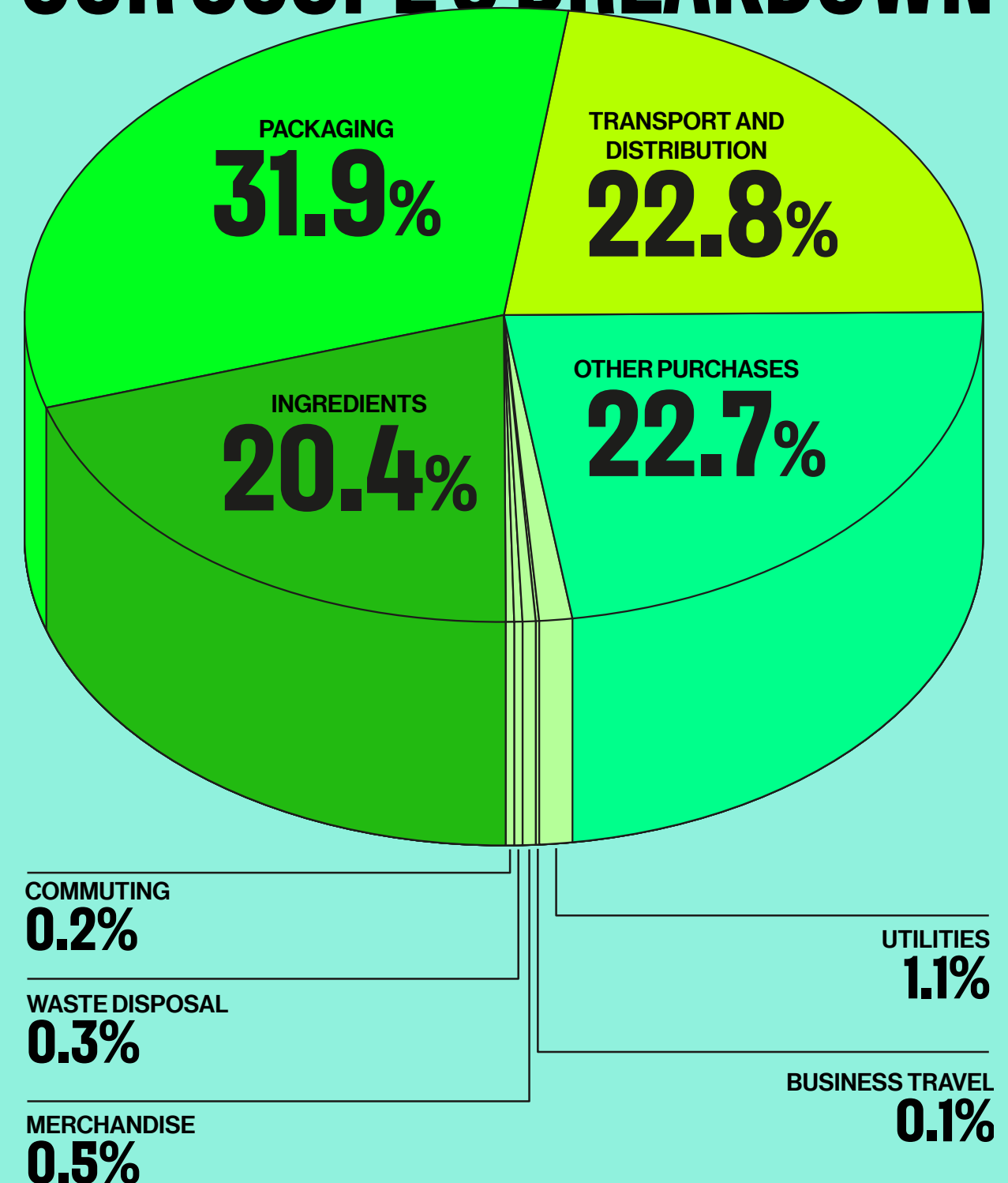
Q3

Extend the project to all of BrewDog's supply chain and work directly with suppliers to help them achieve targets using industry best practices and innovation trials

Q4

Report initial results and share success stories with suppliers and customers.

OUR SCOPE 3 BREAKDOWN



BrewDog's Scope 3 footprint has been significantly impacted by capital expenditure (part of other purchases) in 2021. Due to the high impact ingredients, packaging and transport have on our emissions, these will be the main focus of 2022 reductions! We are looking at cradle to gate of all our supply chain, but in order to make the most impact, we are working with our biggest opportunities for reduction; our barley and malt suppliers, logistics partners in the UK and Europe, as well as our largest packaging suppliers who are working tirelessly to reduce the weight of our packaging, source home grown ingredients and purchase more low carbon transport vehicles!

**PUTTING
THE PLANET,
PEOPLE AND
POSITIVITY
OVER PROFIT**

**WE'VE ALREADY
UNDERTAKEN
GAME-CHANGING
PROJECTS
THAT WILL
TRANSFORM THE
WAY PEOPLE DO
BUSINESS AND
PROTECT OUR
PLANET.**

LOST

WORK ON OUR BEAUTIFUL
9,308 ACRE SITE IN THE
CAIRNGORMS HAS BEGUN,
WITH PEATLAND RESTORATION
ALREADY UNDERWAY AND
APPROVAL GIVEN ON OUR TREE
PLANTING PROGRAMME

UNDER CONSTRUCTION
UNDER CONSTRUCTION
APPROVED
UNDER CONSTRUCTION

FOREST

According to the IPCC's most recent report, "Restoring natural forests and drained peatlands and improving sustainability of managed forests, [...] enhances the resilience of carbon stocks and sinks".

Our investment in this degraded land in Scotland has the ability to breathe life into it, achieving carbon sequestration as well as improving biodiversity and also supporting local livelihoods.

Our first trees will enter the ground in November 2022, after the appropriate land assessments and surveys are complete.

IT'S A TREE COUNTRY

EXTENSIVE ECOLOGICAL SURVEYS

TAKING OUR RESPONSIBILITIES SERIOUSLY WITH THE BENEFIT OF SCOTTISH WOODLAND'S EXPERIENCE IN RURAL DEVELOPMENT AND SUSTAINABLE LAND USE, WE HAVE UNDERTAKEN EXTENSIVE ENVIRONMENTAL AND ECOLOGICAL SURVEYS AND WORKED WITH KEY STAKEHOLDERS SUCH AS THE CAIRNGORMS NATIONAL PARK AND MONADHLIATH DEER MANAGEMENT GROUP TO DEVELOP OUR PLANS. THE SMALL WORLD TEAM ALSO SET US THE CHALLENGE OF DEVELOPING HOLISTIC NATURE-BASED SOLUTIONS FOR RESILIENT ECO-SYSTEMS AND COMMUNITIES. THIS MEANS SUPPORTING A HEALTHY RIVER BASIN CATCHMENT, SUPPORTING AND RESTORING NATURE FOR BIO-DIVERSITY NET GAIN, PROTECTING ENDANGERED SPECIES AND FRAGILE HABITATS, AND MAINTAINING A POSITIVE RELATIONSHIP BETWEEN PEOPLE AND THE LANDSCAPE; AS WELL AS MITIGATING THE IMPACT OF AIR POLLUTION.

DUE DILLIGENCE

MAKING SURE OUR PLANS SUPPORT CLIMATE ADAPTATION AND MITIGATION, WHILST BEING SENSITIVE TO THE NEEDS OF THE LOCAL AREA, COMMUNITY, AND SPECIAL LANDSCAPE DESIGNATIONS IS ALWAYS A CHALLENGE, AND TAKES TIME AND CARE. SCOTTISH WOODLANDS WORKED CLOSELY WITH OUR COMMUNITY AND THE RELEVANT ORGANISATIONS TO PREPARE OUR PLANS FOR SCOTTISH FORESTY'S APPROVAL. WE ARE DELIGHTED TO CONFIRM THAT APPROVALS WERE GRANTED IN JUNE 2022.

TREE PLANTING PHASE 1

WE ARE PLANNING FOR TWO PHASES OF WOODLAND CREATION BASED ON THE PRINCIPLE OF 'RIGHT TREE, RIGHT PLACE'. FURTHER TO THE APPROVAL OF PERMISSION AND GRANTS FROM SCOTTISH FORESTRY, WE WILL NOW COMMENCE THE PLANTING OF MORE THAN 1 MILLION NATIVE TREES TO CREATE A BIO DIVERSE BROADLEAF WOODLAND AND ECOSYSTEM ACROSS 760 HA.



FOR PEAT'S SAKE

PEATLANDS ARE GLOBALLY IMPORTANT

PEATLAND RESTORATION IS NOT AN EXACT SCIENCE BUT INVOLVES THESE 7 KEY STEPS:

PEATLANDS COVER JUST
3%
OF THE WORLD'S SURFACE...

...YET HOLD NEARLY
30%
OF THE SOIL CARBON

13%
OF THE WORLD'S BLANKET BOG FORMED IN THE UK

80%
OF UK PEATLANDS HAVE BEEN MODIFIED AS A RESULT OF PAST AND PRESENT MANAGEMENT

WHAT IS PEAT RESTORATION?
PEAT RESTORATION INVOLVES RAISING THE WATER TABLE NEARER TO THE SURFACE AND RE-ESTABLISHING PEAT FORMING FEN OR BOG VEGETATION. PEATLANDS DAMAGED BY DRAINAGE AND OTHER HUMAN ACTIVITIES CAN RAPIDLY LOSE THEIR STORED CARBON PREDOMINANTLY IN THE FORM OF CARBON DIOXIDE (CO₂). PEATLANDS ARE COMPLEX AS THEY BOTH EMIT AND CAPTURE CO₂, AND THE BALANCE BETWEEN THESE PROCESSES DEPENDS ON PEATLAND CONDITION. THEY MAY ALSO BE SOURCES OR SINKS OF METHANE AND BE SOURCES OF NITROUS OXIDE. THE EVIDENCE SUGGESTS THAT, OVERALL, PEATLAND RESTORATION DELIVERS GREENHOUSE GAS BENEFITS BY PROTECTING STORED CARBON AND DRASTICALLY REDUCING THE AMOUNT OF CARBON DIOXIDE EMITTED, EVEN AFTER ACCOUNTING FOR THE INITIAL INCREASE IN METHANE EMISSIONS FOLLOWING RE-WETTING.

- 1. PEATLAND ASSESSMENT
- 2. ECOLOGICAL SURVEYS
- 3. REWETTING THROUGH DAMMING MAN-MADE DRAINS AND DITCHES AND RE-PROFILING GULLIES
- 4. REPROFILING ERODED PEAT HAGS
- 5. RE-VEGETATING THROUGH COLLECTING ON-SITE PLANT MATERIAL FROM A DONOR SITE AND RELOCATING IT LOCALLY IN ERODED AREAS
- 6. MONITORING THE RESTORED LAND
- 7. MAINTENANCE OPERATIONS SUCH AS REFORMING DAMS AND ADDITIONAL RE-VEGETATION WORKS

LOST FOREST WORKS COMMENCE
IN THE LOST FOREST, WORK COMMENCED ON OUR FIRST PHASE OF PEATLAND RESTORATION IN SEPTEMBER 2021 TO MAKE THE BLANKET BOG SOGGY AGAIN; THE IDEAL CONDITIONS FOR SPHAGNUM MOSSES AND COTTON GRASS TO GROW. AS PART OF THE UPLAND LANDSCAPE, BLANKET BOG IN ITS NATURAL STATE SUPPORTS AND ATTRACTS A SPECIAL ARRAY OF WILDLIFE, INCLUDING HEN HARRIERS, RED GROUSE, GOLDEN PLOVER AND GREENSHANK, ALONG WITH INVERTEBRATES SUCH AS DRAGONFLIES. WE HAVE ALREADY COMPLETED PHASE 1 OF OUR PEATLAND RESTORATION, AND WE'RE ON TRACK TO COMMENCE WOODLAND CREATION AS PER OUR ORIGINAL SCHEDULE, STARTING IN THE SECOND HALF OF 2022.

TIMESCALE (INDICATIVE)	APR 2021 — MAR 2022	APR 2022 — MAR 2023	APR 2023 — MAR 2024	APR 2024 — MAR 2025
PEATLAND RESTORATION	✓ PHASE 1	PHASE 2	PHASE 3	PHASE 4
WOODLAND CREATION		PHASE 2	PHASE 3	

Our projects will be registered on the UK Land Carbon Registry. Jointly they are estimated to sequester 308,122 tCO₂e (Woodland Pending Issuance Units in total over 100-year period).

BREWDOG IS CARBON NEGATIVE



TO REMOVE ALL OUR CARBON UNTIL WE RECEIVE CARBON ACCREDITATION FOR OUR LOST FOREST AND PEATLANDS, WE WILL WORK WITH PARTNERS AND PROJECTS WHICH HAVE THE HIGHEST STANDARD OF ACCREDITATION AND HAVE BEEN ADDITIONALLY VETTED BY THE TEAM AT SMALL WORLD CONSULTING FOR THEIR WIDER ENVIRONMENTAL AND HUMAN BENEFITS

THE DARKWOODS PROJECT

Working with our partners at the National Conservancy Canada, the DarkWoods project is helping us to protect and regenerate one of the most important ecosystems in the world. The work at the DarkWoods conservation project provides the NCC with the support for their missions to plant 1 billion trees across the planet! NCC was included on the Charity Intelligence Top 100 Charity list in 2021. They were the only national private land organization to earn top marks on the list: a five-star grade based on financial transparency, accountability to donors and cost-efficiency



BREWDOG



&

FRIENDS

THE WORLD'S MOST
SUSTAINABLE BEER CLUB

Most beer clubs require multiple breweries to send their beers to a single destination to be repacked and shipped out to subscribers. BrewDog & Friends is different. Our beer club massively reduces the footprint of the beers included by brewing them all in one place! We partner with different breweries, charities, brands and organisations every month to brew all sorts of beers, from traditional German styles right through to experimental twists on modern beer profiles.

We have seen in excess of 8,000 subscribers since we launched BrewDog & Friends in April 2021, sending 8 cans of awesome hoppy goodness to eco-friendly beer fans around the UK every month. There is also an Alcohol Free BrewDog & Friends subscription in the USA for our pals across the pond!





THE BREWDOG BLUEPRINT

CREATING THE BEER
BUSINESS OF TOMORROW

MAY 2022

BREWDOG

UNESTABLISHED 2007

**FOR BETTER BEER.
FOR A BETTER PLANET.
POWERED BY THE PEOPLE.
FOR US ALL.**

THAT
STARTED IN A GARAGE IS
NOW 105 DOG-YEARS OLD.

It has not always been easy and ours is the story of a young company and young leadership team very much growing up in public, with all the challenges that come along with that.

Looking ahead, we have a once in a generation opportunity to build a business and a brand that has a huge positive impact on the world. We firmly believe in our goal of becoming one of the world's five most valuable beer brands over the next five years, all whilst flying the flag for sustainability and better business.

Today, to mark our 15-year anniversary, we are publishing the BrewDog Blueprint. This is the roadmap for the future of our business as we look to build on our three foundational pillars: Beer, People and Planet.

And whilst all three pillars are fundamental to what we do, the most significant initiatives we are launching today are those focused on our people.

We believe that our long-term destiny is determined by how well we look after our amazing people, and whilst we have made some mistakes along the way, this belief is now even more central to our ambitions.

We are determined to create a completely new type of business model. One where our team members are truly connected to the business, and where every single person in the team benefits from the growth and success that we collectively create.

BrewDog has always been about doing things in a radically different way, building the business in a brave and uncompromising manner, with people and great beer at its core and our most unconventional initiatives have always proved to be our most pivotal.

To that end, the two new people initiatives that we are launching today are my two favourite things that we have ever done as a business.

Hold Fast,
James

To mark our 15-year anniversary, we published the BREWDOG BLUEPRINT – a roadmap for the future of BrewDog.

This is the roadmap for the future of our business as we look to build on our three foundational pillars:

BEER, PEOPLE and PLANET.

And whilst all three pillars are fundamental to what we do, the most significant initiatives we are launching are focused on our people.

We are determined to create a completely new type of business model. One where our team members are truly connected to the business, and where every single person in the team benefits from the growth and success that we collectively create.

That's why we are sharing almost

£100M of BREWDOG EQUITY

with our team members and

SHARING 50% of each BREWDOG BAR'S PROFITS with its team members.

Read the BREWDOG BLUEPRINT in full
www.brewdog.com/uk/brewdog-blueprint

POP IS FOR... PLANET OVER PROFIT



A SODA THAT COMMITS 100% OF ALL PROFITS* WE EARN FROM MAKING THE SODA TO HELP OUR PLANET.

The people who brought you good beer now bring you good soda. But soda with a difference. One that delivers a radical new business model for the twenty-first century. That puts the planet over profit. That raises awareness of the climate crisis and unites people for a better tomorrow.

Since launching P.O.P. soda in 2022, charities and organisations have been able to apply for funding, and our panel of both BrewDog staff and respected third parties will be selecting the chosen charities to receive the profits from the soda later this year.

*Net profit

OFFICIALLY A CERTIFIED B CORP



IN 2021, WE ACHIEVED B CORP STATUS, AND WE'RE PROUD TO FLY THE FLAG FOR BOUNDARY-PUSHING ETHICAL BUSINESS.

CERTIFIED B CORPORATIONS ARE BUSINESSES THAT MEET THE HIGHEST STANDARDS OF VERIFIED SOCIAL AND ENVIRONMENTAL PERFORMANCE, PUBLIC TRANSPARENCY, AND LEGAL ACCOUNTABILITY TO BALANCE PROFIT AND PURPOSE. B CORPS ARE ACCELERATING A GLOBAL CULTURE SHIFT TO REDEFINE SUCCESS IN BUSINESS AND BUILD A MORE INCLUSIVE AND SUSTAINABLE ECONOMY.

A FORCE FOR GOOD

BREWDOG DIVERSITY, INCLUSION AND EQUALITY FORUM

BrewDog recently re-launched our internal Diversity, Equality and Inclusion Forum in 2021, with the overall aim of creating a sustainable brand that is open, diverse and welcoming to everyone. With participating team members from across the business, it is helping implement change, while also helping to shape the agenda across the brewing industry

MENTAL HEALTH

At the end of 2021 BrewDog started an initiative to train the crew in Mental Health First Aid. By the end of 2022, 10% of our employees will be qualified Mental Health First Aiders. Crew are identified on their high vis PPE as well as lanyards across PLC and Retail. We also have a monthly wellbeing lab which was covering topics from men's mental health to menopause.



BREWDOG ♥ ELLON

BrewDog has sought to play an active role in the community in Ellon, working with the local council, and plans to organise visits to the Bio-energy Facility and ecological treatment for local schoolchildren to show how businesses can combine commercial objectives with wider sustainability goals. Care has been taken to ensure local people are well informed about the changes.

Also, its use as a showcase facility for the brewing sector and food industry, will mean that hospitality businesses will benefit from increased footfall.



BEER FOR GOOD

BrewDog has sought to use our commercial power to take innovative action on key social issues. This has been a key part of their strategy for a number of years and recent Brewdog activity includes:

- In 2021, BrewDog launched 'Sad AF', an alcohol-free beer that supported the mental health campaign #IAMWHOLE to raise awareness of Seasonal Affective Disorder.
- In addition to our popular alcohol-free beers, the new 'POP Soda' brand was launched in 2022. POP stands for 'Planet over Profit'. All profits are used to support community or sustainability projects, starting with a donation to Sustainable Global Gardens.
- In 2022, BrewDog released 'United for Ukraine', a beer with 100% of all revenue donated to the Disasters Emergency Committee Appeal for humanitarian efforts in Ukraine.

THE SCIENCE BIT.

THE METHODOLOGY

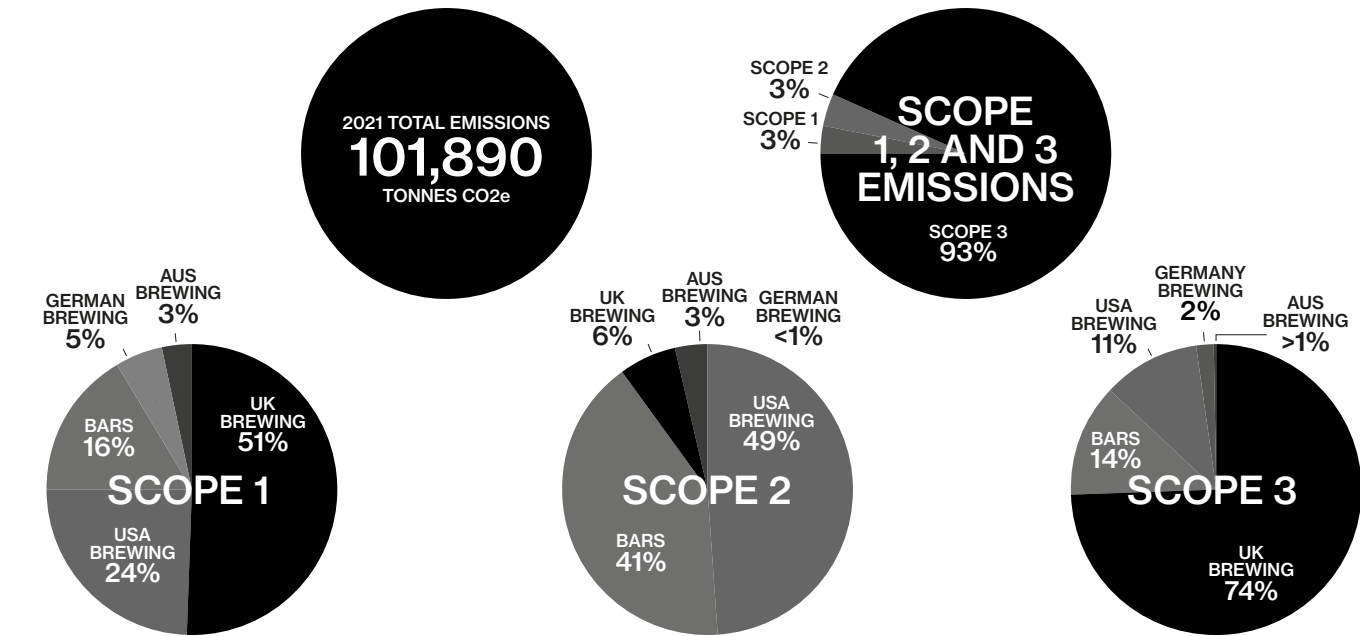
Any carbon footprint analysis is based on a number of best estimates and this is not an exact science. We have worked with Professor Mike Berners-Lee and his team at Small World Consulting and environmental consultants Carbon Architecture to put these numbers together and we will regularly update and 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

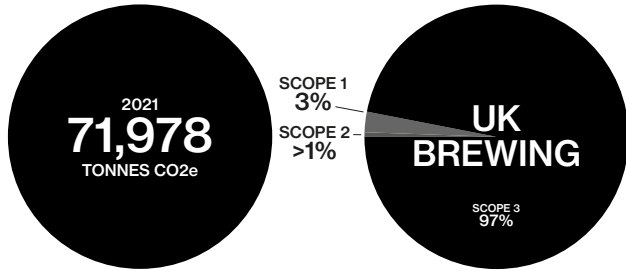
BREWDOG'S 2021 CARBON FOOTPRINT

BUSINESS UNIT	2021 OUTPUT	SCOPE 1	SCOPE 2	SCOPE 3	TOTAL
UK Brewing	887,148	1,804	205	69,970	71,978
US Brewing	93,045	864	1,572	10,152	12,589
German Brewing	20,173	192	<1	1,626	1,818
Australian Brewing	3,004	114	110	237	462
BrewDog Bars	n/a	581	1,310	13,151	15,042
TOTAL (TCO ₂ e)		3,555	3,198	95,136	101,890



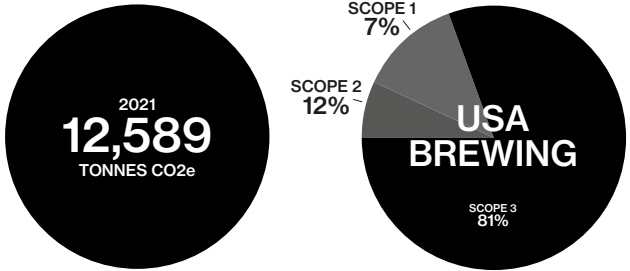
UK BREWING

Scope 1 & 2: 2,009 tonnes CO₂e
Scope 3: 69,970 tonnes CO₂e



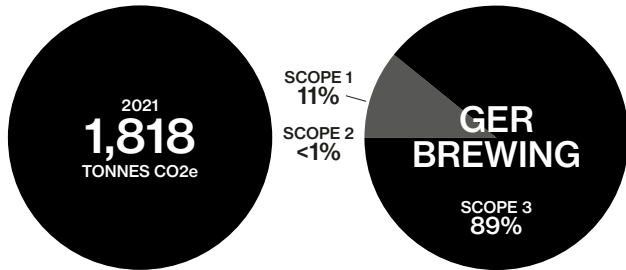
USA BREWING

Scope 1 & 2: 2,437 tonnes CO₂e
Scope 3: 10,152 tonnes CO₂e



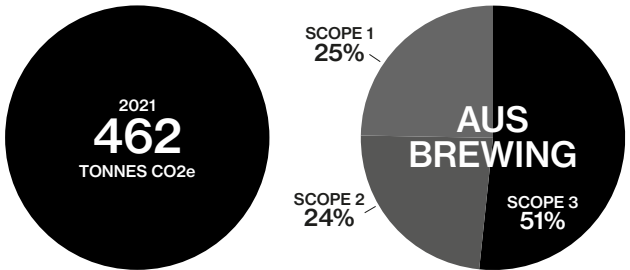
GERMANY BREWING

Scope 1 & 2: 192 tonnes CO₂e
Scope 3: 1,626 tonnes CO₂e



AUSTRALIA BREWING

Scope 1 & 2: 224 tonnes CO₂e
Scope 3: 237 tonnes CO₂e



BREWDOG BARS

We have over 115 global retail locations

Scope 1 & 2: 1,892 tonnes CO₂e
Scope 3: 13,151 tonnes CO₂e



Our International bars don't include Scope 3 emissions since we don't quite have a method of collecting this data. We're working with all our teams to build this into next year's calculations.

We have included all Scope 1 and 2 emissions data from all bars across our global operations

CARBON CREDITS

From 22 August 2020 have been investing in high quality carbon credits. We want to have a positive impact on our planet and want to make sure we're removing more carbon that we emit. Every time someone buys a BrewDog beer, the world gets less carbon.

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.

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BEER PLANET PEOPLE

[BREWDOG.COM/TOMORROW](https://www.brewdog.com/tomorrow)