

MAKE EARTH GREAT AGAIN



SUSTAINABILITY REPORT #1

BREWDOG'S PUNKED-UP-PLAN



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

FOR US ALL.

FOREWORD

PROFESSOR MIKE BERNERS-LEE IS ONE OF THE WORLD'S LEADING EXPERTS IN CARBON FOOT-PRINTING AND SUSTAINABILITY. MIKE IS BREWDOG'S LEAD SCIENTIFIC ADVISOR, AND WITH HIS TEAM, HAS MAPPED OUT A JOURNEY OF TRANSFORMATION ACROSS THE ENTIRE BREWDOG BUSINESS.

DEAR BREWDOG

**AFTER DECADES OF
INACTION WE HAVE A FULL
ON CLIMATE CRISIS ON
OUR HANDS.**

The scale and speed of the change we now need is enormous, and cuts right across politics, business and every corner of society.

The good news is that if we are smart about our transition, we can make our lives better at the same time as more sustainable.

But we have learned that it is no good waiting for our politicians to lead the way. And so far, almost the entire business world has dragged its feet with a mixture of denial, greenwash, apathy and fear.

**WITH THE ACTIONS LAID OUT
IN THIS REPORT, BREWDOG
IS GIVING SOME OF THE
LEADERSHIP THE WORLD SO
BADLY NEEDS.**

**THEY ARE RAISING THE BAR
FOR THE BUSINESS WORLD.**

Both in their strong carbon cutting action and their straight talking. And this is just the start.

Going forwards they won't be perfect. They'll make mistakes and they'll need to be honest about them. They won't need to beat themselves up but they mustn't let themselves off the hook either. The message they send to the rest of the business world is that if they can say it like it is, everyone else had better do likewise.

It has been a joy to work with BrewDog on these first big steps of their transition. The energy and freshness has been amazing so far. With my team at Small World we've been crunching the carbon numbers, finding and helping to select only top quality carbon removals projects that also support the whole natural world, and to lay down the ways in which sustainability can be built into everything BrewDog does, says and thinks – so that (in moderation of course) every BrewDog beer can represent another small nudge for a better world.



PROFESSOR MIKE BERNERS-LEE

LEAD SCIENTIFIC ADVISOR
BREWDOG

ENSURING WE HAVE A PLANET TO BREW BEER ON.



THE TIME IS NOW.

IN 2018, THE IPCC – AN INTERGOVERNMENTAL BODY OF THE UNITED NATIONS – GAVE INDUSTRY 12 YEARS TO RADICALLY REDUCE ENVIRONMENTAL POLLUTION BEFORE OUR CLIMATE HITS AN IRREVERSIBLE TIPPING POINT.

CHANGE IN BUSINESS ISN'T HAPPENING FAST ENOUGH. WE NEED TO MAKE THINGS RIGHT IN EVERYTHING WE DO.

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

DEAR PEOPLE OF THE WORLD

AT BREWDOG WE THOUGHT WE WERE DOING OUR BIT FOR THE PLANET.

But, after meeting David Attenborough and hearing him deliver a talk on climate change we started doing much more research into the matter.

And then it hit us, the blindingly stark realisation that we were not doing anything like enough. And in fact we were massively contributing to the current existential problem that our planet and our species are facing.

The scientific consensus is clear: we are sleepwalking off the edge of a cliff. Unless the world confronts the urgent carbon problem, science tells us that the results will be catastrophic.

There has been too much bullshit and lack of meaningful action for too long.

HUGE CHANGE IS NEEDED, RIGHT NOW.

And we want to make BrewDog a catalyst for change in our industry and beyond.

WE FULLY ACKNOWLEDGE THAT WE ARE A LONG WAY FROM PERFECT.

We are learning as we go – we have made mistakes – and will continue to make mistakes. However, we are determined to rapidly and fundamentally change everything as we aspire to set a new global standard for sustainability.

WE WILL BE COMPLETELY TRANSPARENT AND OPEN IN EVERYTHING WE DO.

We will share the good and the bad in all its gory details, starting from today, in this report. We also commit to working with the best and most progressive minds in this fight, including working ever closer with our Lead Scientific Advisor, Professor Mike Berners-Lee.

Making sure that we, and future generations have a planet to brew beer, is the single biggest focus of BrewDog, forever.

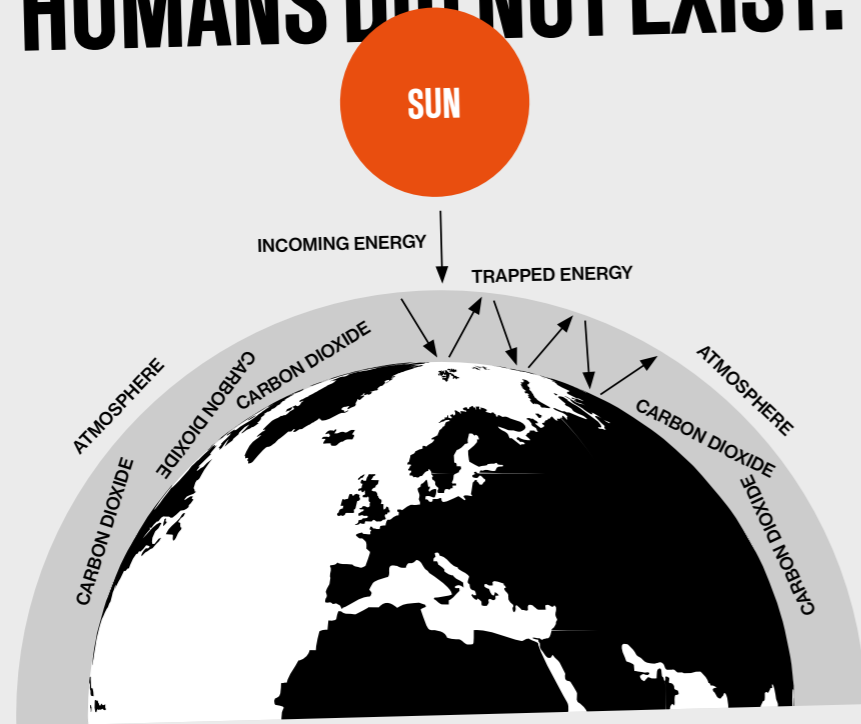
Keep on rocking in the free world...

**JAMES & MARTIN
AND ALL OF US AT BREWDOG**

AUGUST 2020

WHY THIS IS IMPORTANT?

THE LAST TIME CO₂ WAS THIS HIGH, HUMANS DID NOT EXIST.



As we near the record for the highest CO₂ concentration in human history, climate scientists worry about where we're rapidly heading. Even as we publish this report, scientists have recorded the hottest temperature ever measured on earth.

More CO₂ in the air prevents heat energy escaping into space, trapping more heat in our atmosphere causing global warming. We need to reduce the amount of CO₂ in our atmosphere to get our planet back to its natural equilibrium.

CLIMATE CHANGE IMPACTS ALL OF US.

The globe is split vertically, with the left side in white and the right side in orange. A thermometer icon is positioned above the globe. Surrounding the globe are several icons and text blocks:

- RISING SEA LEVELS**: The cost of adapting coastal areas to rising sea levels.
- RESOURCE WARS**: More wars to gain access to limited resources.
- FRESH WATER**: Fresh water will be in short supply in some areas.
- HEALTH**: Diseases will spread due to higher temperatures.
- MIGRATION**: Relocation of whole towns.
- FOOD SECURITY**: Shrinking productivity of harvests.
- INFLATION**: Prices of basic foodstuffs and consumer goods will rise.
- WEATHER**: Extreme meteorological phenomena will cause widespread poverty.

NET ZERO CO₂ TODAY

TODAY, WE ARE IN THE MIDST OF A CLIMATE CRISIS. IT IS A CRISIS OF OUR OWN DESIGN, DRIVEN BY BIG BUSINESS.

THE IPCC HAVE AGREED WE HAVE UNTIL 2030 TO MAKE CHANGE BEFORE OUR CLIMATE HITS AN IRREVERSIBLE TIPPING POINT.

NOW, IT IS TIME FOR US TO STEP UP AND **MAKE THINGS RIGHT.**

JUST IN TIME.

**BEFORE 2030—
PATAGONIA, BREWDOG, MICROSOFT**

TOO DAMN LATE.

**2040—AMAZON
2050—DIAGEO
2050—BP
2050—NESTLÉ
2050—UNILEVER
2050—BEN & JERRY'S**



BREWDOG IS NOW CARBON NEGATIVE.

CARBON NEGATIVE
Adjective

The reduction of an entity's carbon footprint to less than neutral, so that the entity has a net effect of removing carbon dioxide from the atmosphere rather than adding it.



THE CARBON FOOTPRINT OF A PUNK

WHEN WE COUNT CARBON, WE COUNT ALL OF IT.

We double offset our scope 1, 2 and upstream scope 3 carbon. 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 offset our true impact. We work with our Lead Scientific Advisor, world leading expert, Professor Mike Berners-Lee in calculating our carbon footprint and designing our removal initiatives. We share the full breakdown of the calculations at the back of this report.

WE NOW REMOVE TWICE AS MUCH CARBON FROM OUR ATMOSPHERE THAN WE EMIT EACH YEAR, WHILST SIMULTANEOUSLY DOING ALL WE CAN TO DRIVE OUR EMISSIONS TO ZERO.

FORGIVE YOUR CO₂



BREWDOG IS NOW CARBON NEGATIVE

OUR CARBON. OUR PROBLEM.



BUT... TREES ARE NATURE'S CARBON KILLER

SO WE BOUGHT 2,050 ACRES TO CREATE
OUR OWN BREWDOG FOREST

BREWDOG FOREST



BY 2022, WE WILL HAVE PLANTED ONE MILLION TREES.

Our carbon emissions are our problem. So, we are going to own the solution and fix it ourselves.

We have purchased 2,050 acres of land in the Scottish Highlands just north of Loch Lomond, which is currently used as grazing land.

We are going to create 1,500 acres of broadleaf native woodlands and an ecosystem with the Woodland Carbon Code accreditation program. As well as sequestering carbon, woodland creation also promotes Biodiversity, natural flood attenuation and drives rural economic development.

Over the next few years we will plant over one million trees.

Restored peatlands are highly effective for CO₂ sequestration, which is why we are dedicating 550 acres to peatland restoration, working with the Peatland Code directly.

All of the carbon removal work at the BrewDog forest will be third party verified with regular share updates and reports on our progress.

In addition to woodland creation and peatland restoration, we are also going to create a sustainable BrewDog campsite at the location and run sustainability retreats and workshops at the BrewDog Forest.

“The BrewDog Forest will be one of the largest native woodlands created in the UK for many years.”

KILLING CARBON. DEAD.

OUR INTERIM REMOVALS.



TO DOUBLE REMOVE ALL OUR CARBON UNTIL WE START PLANTING OUR BREWD OG FOREST AND RESTORING OUR PEATLANDS WE WILL WORK WITH PARTNERS. ALL OF THE PARTNERS AND PROJECTS HAVE THE HIGHEST STANDARD OF ACCREDITATION AND HAVE BEEN ADDITIONALLY VETTED BY THE TEAM AT SMALL WORLD CONSULTING.

“BrewDog’s commitment to reduce and capture carbon is taking a leading stance on fighting climate change... This, and their scientific approach, is perfectly aligned to our work and we hope their example is followed by others.”

JACK SPEES
Chief Executive
RIBBLE RIVERS TRUST

These are the carbon removal projects we will be funding until we start planting the BrewDog Forest:

PARTNER	PROJECT TYPE	REGISTRY	HOST COUNTRY
The Woodland Trust	Woodland	Woodland Carbon Code	UK
Carbon Neutral	Biodiversity	Gold Standard	Australia
Ribble Rivers Trust	Woodland	Woodland Carbon Code	UK
Nature Conservancy of Canada	Forestry / Landscapes	CGB Standards, Verified Carbon Standard	Canada

ALL OF OUR REMOVAL INITIATIVES ARE BENEFICIAL TO BIODIVERSITY AND LOCAL COMMUNITIES AND ARE ADDITIONAL, CERTIFIED AND VERIFIABLE.

“People want to work for, do business with and buy from organisations that embed positive values in their strategy, and BrewDog clearly demonstrates this in its ‘Brewdog Tomorrow’ initiatives. This is why the Woodland Trust is delighted to be working with BrewDog, with them becoming a formal Woodland Carbon partner as part of their carbon positive strategy.”

We look forward to working with BrewDog on providing first class UK woodland projects that deliver benefits for climate, people and nature.”

DR DARREN MOORCROFT
Chief Executive
WOODLAND TRUST

“BrewDog has done more than address our very real climate crisis; it has also acknowledged the need to halt biodiversity loss by funding native reforestation in the Outback of Australia...”

BrewDog’s approach shows a true awareness of our impact on the planet.”

GEORGIANA ROGERS
Director
CARBON NEUTRAL

INTERIM REMOVAL PARTNERS

From 22 August 2020 we will remove twice as much carbon from the air each year as we emit. We want to have a positive impact on our planet and want to go beyond carbon neutrality. Every time someone buys a BrewDog beer, the world gets less carbon.



OUR CARBON REDUCTION PLAN.

IT IS, OF COURSE, BEST NOT TO EMIT CARBON IN THE FIRST PLACE. WE ARE WORKING ON A FAST-TRACK 24 MONTH PLAN TO REDUCE THE CARBON FOOTPRINT OF OUR OPERATIONS, ALONG WITH OUR JOURNEY TO BECOME ZERO-WASTE.

GREEN ENERGY

We turn the main natural by-product of beer making – malted barley – into green gas (biomethane). Thus removes any reliance on fossil fuels in the brewing process.

WIND POWERED

All of the electricity used to brew BrewDog beer in the UK comes directly from local wind turbines. Never have we appreciated the Scottish weather more. Our bars are now also powered by wind turbines too.



ANAEROBIC DIGESTER BIO-PLANT

Water is one of the most precious resources and the supply is under increasing pressure. But, WE won't waste a drop – an anaerobic digester bio-plant that turns our waste brewery water into pure H₂O and biomethane to be re-used is set to be operational by 2021.

ELECTRIC DELIVERY FLEET

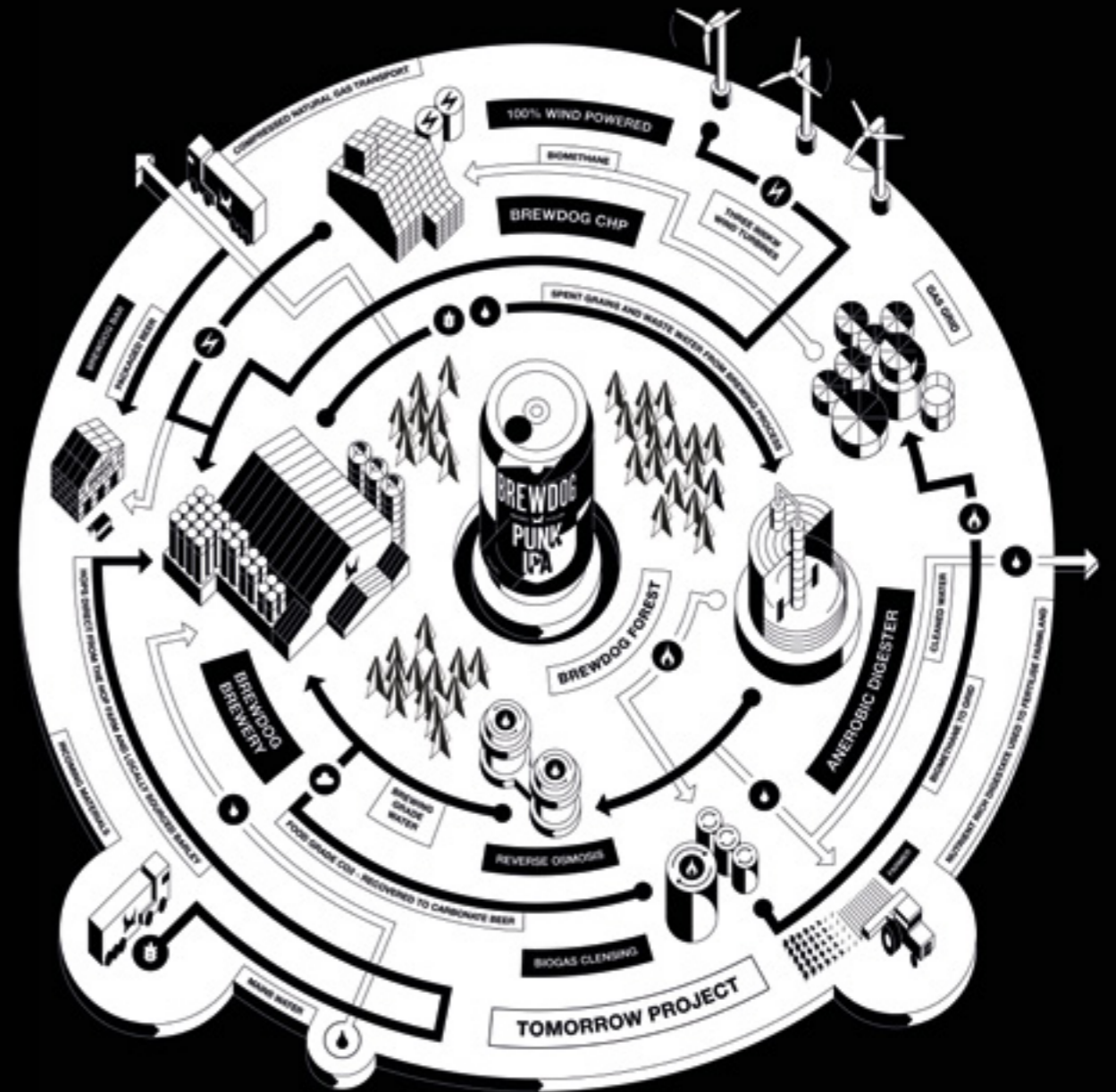
We are fast-tracking the electrification of our vehicle fleet and our first fully electric delivery vehicles will hit the streets this year.



CO₂ FERMENTATION RECOVERY

One of the by-products of fermentation is CO₂. We are working on capturing the CO₂ produced during fermentation and using this downstream to carbonate our beers.

THE PLANET BREWDOG ECOSYSTEM



WASTE WORLD.

WE ARE ON A MISSION TO REDUCE WASTE IN OUR OWN BUSINESS AND BEYOND. AS WELL AS BECOMING A ZERO WASTE BUSINESS, THROUGH UPCYCLING FOOD WASTE AND TRASH CANS WE WANT TO HELP REDUCE WASTE BEYOND BREWDOG.



TRASH CAN PUNK

Due to print ready processes, minimum run sizes, errors in production and errors in forecasting, almost one billion perfectly good drinks cans never get used every year.

We had one million old-branded cans ourselves which were in otherwise perfectly good condition, which we have re-labelled and now launched on our e-commerce platform.

And we will continue to re-purpose any wasted can into a PUNK IPA beer. Their uniform doesn't quite look the part, but we can assure you it's what's inside that counts.

We are in the process of sourcing any other wasted cans that would be destined for landfill.

IN THE SPIRIT OF SUPPORTING THE UNDERDOGS OF THE FOOD CHAIN, WE HAVE CRAFTED INCREDIBLE BEERS MADE FROM SURPLUS FRESH BREAD AND FRUIT THAT WOULD OTHERWISE BE WASTED. WE'VE ALSO INVENTED THE PERFECT VODKA MADE FROM NOT-SO-PERFECT BREWDOG BEER.

MEGA BEER

Food production is the biggest single contributor to climate change. Yet well over one third of all food is wasted. In this lager, we replaced 20% of the barley with surplus fresh bread. As well as helping solve the global food waste challenge, MEGA (Make Earth Great Again) beer reduces the demand for land, water and energy.



COSMIC CRUSH

100% of the fruit that we use in all of our Overworks Sour Beers is surplus fruit that would otherwise be wasted. These fruits are cosmetically defective or at the end of their shelf-life.



BAD BEER VODKA

Every brewery wastes beer. From brews which are not quite in spec, to beers which are too old to sell. All of our beer that is otherwise wasted we are developing into a zero waste vodka, helping massively reduce our annual waste.



DOG BISCUITS

We take any spent spelt from our brewhouse and turn it into tasty dog biscuits which reduces our waste and keeps our canine friends happy. Alcohol free of course.

ALL PARTS OF OUR BUSINESS ARE NOW CARBON NEGATIVE.

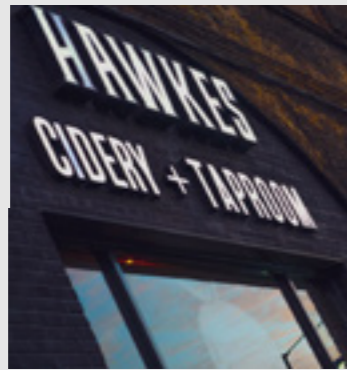
CARBON NEGATIVE BEERS



CARBON NEGATIVE BARS



CARBON NEGATIVE CIDER



CARBON NEGATIVE USA BREWERY



CARBON NEGATIVE AUSTRALIA BREWERY



CARBON NEGATIVE GERMANY BREWERY



CARBON NEGATIVE SPIRITS



CARBON NEGATIVE E-COMMERCE



TOMORROW STARTS TODAY.



AT BREWDOG, WE BELIEVE THAT BY HAVING THE CONVICTION TO DO THINGS ON OUR TERMS, AND BY LIVING THE PUNK DIY ETHOS, WE CAN CHANGE THE WORLD WITH CRAFT BEER... ONE GLASS AT A TIME.

AND OUR WORLD NEEDS CHANGE NOW MORE THAN EVER.

From working with the best experts in the world, to double offsetting all our emissions, and from waging a war on waste, to investing heavily to reduce our emissions to zero, we are putting everything on the line for what we believe in.

We are learning as we go and will continue to make mistakes. We promise to share the good and the bad from our journey to become the world's most sustainable drinks business.

MAKING SURE THAT WE, AND FUTURE GENERATIONS HAVE A PLANET TO BREW BEER IS THE SINGLE BIGGEST FOCUS OF BREWDOG.

FOREVER.

THE SCIENCE BIT.

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.

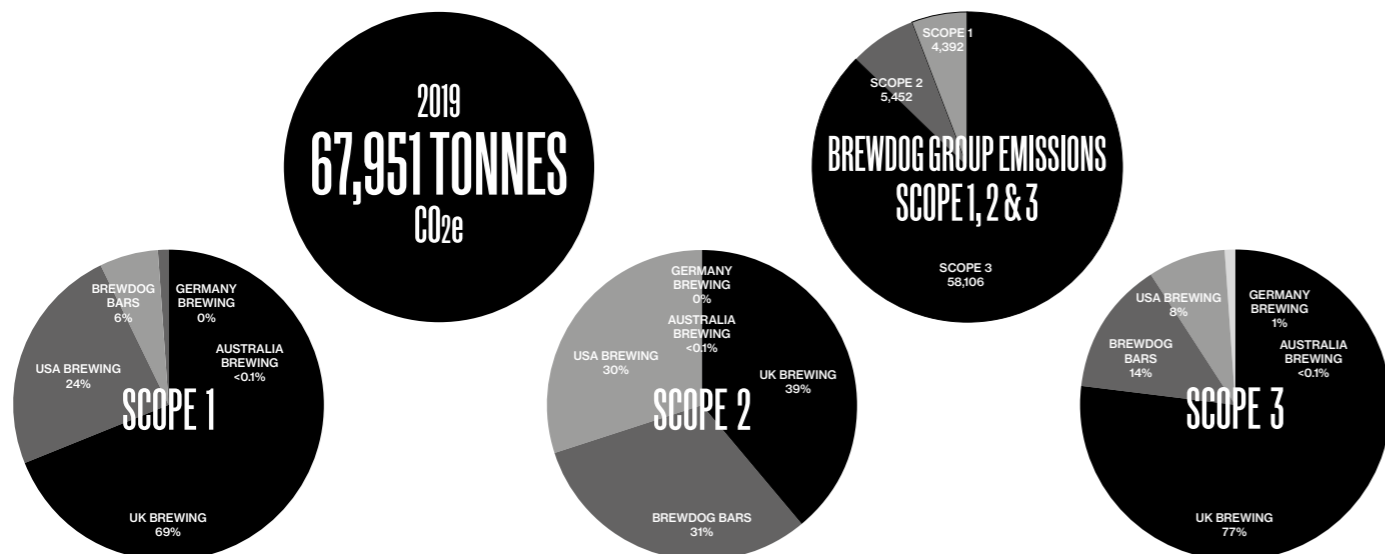
We steadfastly believe this is the only real way to count carbon and calculate our true impact. We have also broken our business down into the following categories:

- UK Brewing (includes BrewDog Distilling & Hawkes Cidery)
- USA Brewing
- Germany Brewing
- Australia Brewing
- BrewDog Bars

BREWDOG'S 2019 CARBON FOOTPRINT

The total carbon footprint of our business in 2019 was 67,951 tonnes CO₂e

BUSINESS UNIT	2019 OUTPUT hL	SCOPE 1 Tonnes	SCOPE 2 Tonnes	SCOPE 3 Tonnes	TOTAL TCO ₂ e
UK Brewing	554,636	3,017	2,125	44,766	49,908
USA Brewing	59,000	1,077	1,648	4,524	7,249
Germany Brewing	7,500	38	–	575	613
Australia Brewing	300	0.118	2.255	23	23
BrewDog Bars	n/a	260	1,677	8,218	10,156
TOTAL (TCO₂e)		4,392	5,452	58,106	67,951



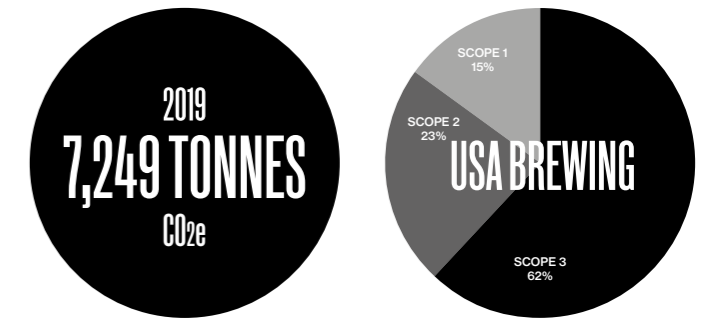
UK BREWING

Scope 1 & 2: 5,142 tonnes CO₂e
Scope 3: 44,766 tonnes CO₂e



USA BREWING

Scope 1 & 2: 2,725 tonnes CO₂e
Scope 3: 4,524 tonnes CO₂e



GERMANY BREWING

Scope 1 & 2: 38 tonnes CO₂e
Scope 3: 575 tonnes CO₂e



AUSTRALIA BREWING

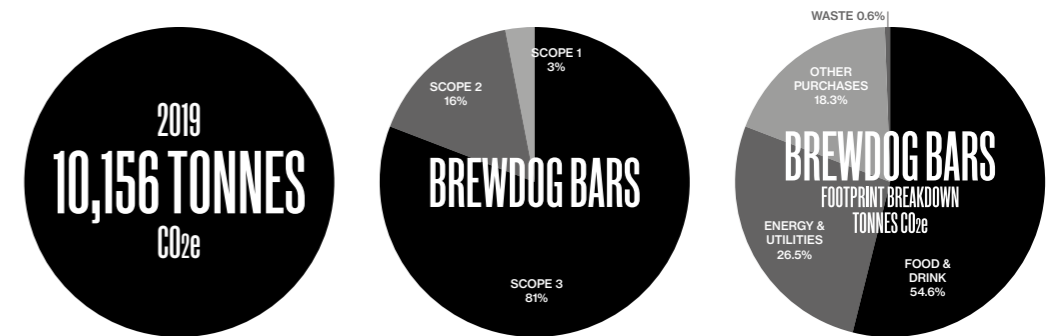
Scope 1 & 2: 2.4 tonnes CO₂e
Scope 3: 23 tonnes CO₂e



BREWDOG BARS

We have 72 owned BrewDog retail locations globally.

Scope 1 & 2: 1,937 tonnes CO₂e
Scope 3: 8,218 tonnes CO₂e



DOUBLE REMOVAL

From 22 August 2020 we will remove twice as much carbon from the air each year as we emit. We want to have a positive impact on our planet and want to go beyond carbon neutrality. 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.



HERE'S TO YOU

**BY DRINKING
BREWDOG BEER
YOU'RE GENUINELY
HAVING A
POSITIVE IMPACT
ON OUR PLANET.**