

# MAKE EARTH GREAT AGAIN

SUSTAINABILITY REPORT #2

## BREWDOG'S PUNKED-UP-PLAN



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

DEAR BREWDOG

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

The world is waking up at last, but there is no time to lose. 2021 needs to be a big year of change. BrewDog is starting to show what it looks like when a business understands the scale and depth of the transition that is required.

When they happen, it is going to be so important to be honest about them, the world is yearning for more truth and less greenwash.

Right now, energy is being saved, energy sources are going renewable, menus are changing, and packaging is being reworked. Carbon is being cut fast and what's left is being taken back out of the air - twice over - and through the highest quality schemes which look after the land. Everything BrewDog thinks, says and does is coming under scrutiny to see how it fits with the world we need to push for. And to create a snowballing effect, BrewDog's consumers, commercial customers and staff are all being invited to join the journey.

The message BrewDog sends out is clear: If a beer and hospitality business can do all this in the midst of a pandemic, there is no excuse for any company that is still sitting on its hands.

**THE ENERGY AND FRESHNESS AT BREWDOG CONTINUES TO INSPIRE AND SHOWS JUST HOW EXCITING THE TRANSITION TO A LOW CARBON WORLD CAN BE.**

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

With my team at Small World, we've been crunching the carbon numbers in ever more detail to better understand new carbon cutting possibilities and how best to remove what's left from the air again. We've been helping BrewDog to develop the coherence that is so rare to find in a company's climate response.

There is still far to go. More is being planned, and many innovations still needing to be thought up from scratch. There haven't been any big mistakes so far, but given the nature of the journey, there are bound to be some.

**"IT IS A JOY TO WORK WITH BREWDOG, RIGHT AT THE FRONT OF THAT WAVE SPEARHEADING AN AMBITION OTHERS ARE NOW FOLLOWING"**



**PROFESSOR MIKE BERNERS-LEE**  
 Lead Scientific Advisor  
 BrewDog

THE TIME IS NOW  
 THE TIME IS NOW  
 THE TIME IS NOW  
 THE TIME IS NOW



IN 2018, THE IPCC—AN INTERGOVERNMENTAL BODY OF THE UNITED NATIONS—GAVE THE 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.

# BREWDOG

A NOTE FROM BREWDOG'S CAPTAINS

*Dear people of the world*

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

As we are in the grips of a pandemic, it's easy to forget the rapidly unfolding global crisis that is climate change. We only have a very brief time window to make the changes necessary to save our home planet.

As a global collective, we need to zero out greenhouse gas emissions from millions of different sources worldwide as well as restore our natural carbon sinks such as peatlands, wetlands, native forests and coastal habitats.

**MONUMENTAL CHANGE IS NEEDED NOW AND INDUSTRY NEEDS TO BE THE DRIVING FORCE.**

It's an enormous task, but there are solutions.

We are now 12 months into our sustainability journey and we are the world's only carbon negative brewery. The last 12 months have been tough: high highs, low lows and incredibly high stakes. We have made big bets and big investments to be planet positive.

**WE HAVE PUT OUR MONEY WHERE OUR HEART IS.**

We are delighted to continue to work with Professor Mike Berners-Lee and his amazing team and they have been central to our entire strategy here. With their guidance:

- We are cutting carbon as fast as we can, in our operations and right through our supply chains.
- We are now the world's only carbon negative brewery.
- Construction has started on our £20m on-site bio-plant.
- We have wind turbines powering our Ellon brewery.
- We have our first electric vehicles on the street.
- Our hop farm is under construction in Ohio.
- We have achieved B Corp certification.
- And work is starting on ecological surveys to sensitively plan for restoration of our peatlands and planting our Lost Forest.

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

Big business has pushed our planet to the brink. We want to show that business can also help save our planet by inspiring others to join us on this path. We are determined to ensure that we have a positive impact on the planet.

IT IS OK FOR OUR BUSINESS TO FAIL.  
 IT IS NOT OK FOR OUR PLANET TO FAIL.

HOLD FAST,

*James & Martin*

UNITED WE STAND FOR BETTER BEER FIERCELY DEFIANT AND INDEPENDENT

FOR EVERY BEER WE MAKE, WE

REMOVE TWICE THE CO<sub>2</sub> THAT WE EMIT





# **IN AUGUST 2020, BREWDOG BECAME A CARBON NEGATIVE BUSINESS.**

**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.**

Working with our lead scientific advisor, world leading expert, Professor Mike Berners-Lee we are doing all we can to drive our emissions to zero, whilst in the meantime removing twice as much carbon from our atmosphere as we emit each year from both our operations and our supply chains.

Whatever carbon we remove, reducing our emissions in the first place is our key priority. So with the help of Mike and his team at Small World Consulting, we are working on a turbo charged carbon reduction plan, setting a target to cut the carbon footprint per pint by 40% within the next twelve months. Predicting the future, we are also putting together a complimentary carbon removal plan for all our remaining emissions. This thinks about the growth pattern of the lost forest, and avoided emissions from peatland restoration, and organic farming opportunities which all help us to sequester carbon and increase biodiversity.

A big disappointment was the loss of our 2,050 acres of land in the Scottish Highlands just North of Loch Lomond after the commercial deal fell through. This delayed our ability to plant trees in Winter 2020/21. We learned from this and were spurred on to seize the opportunity to buy an even more impressive upland landscape near the Cairngorms National Park, with even greater opportunities.

Meanwhile, Mike and his team help us carefully select our carbon removal schemes for the highest standards of social and wider ecological benefits for the carbon BrewDog can't sequester ourselves.

BREWDOG'S CARBON REDUCTION PLAN: OUR CARBON AND ENERGY REPORT SHOWS THAT THROUGH ENERGY EFFICIENCY ACTIONS SUCH AS CIP PROCESS IMPROVEMENTS, FILTRATION OPTIMISATION & IMPROVED REFRIGERATION OPERATION, ALONG WITH TARGETED GREEN UTILITY PROCUREMENT, OUR GROUP SCOPE 1 & 2 EMISSIONS PER hL ARE 34% LOWER THAN THEY WERE IN 2019.

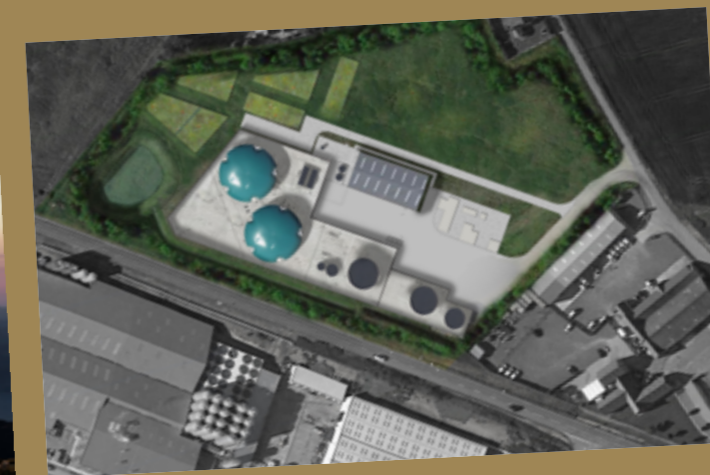
# BREWDOG'S CARBON REDUCTION PLAN.

WE HAVE AMBITIOUS TARGETS FOR ELIMINATING CARBON AND ARE WORKING ON A TURBO CHARGED PLAN TO MAKE OUR DIRECT OPERATIONS BE NET ZERO BY 2022.



## DIRECT WIND POWER

Direct connection with 3x 800kW turbines right next to our brewery, powering us with 2.4MegaWatts of clean energy. This direct wire will guarantee our supply of renewable energy and reduce reliance on grid-based power with certificates.



## BIO PLANT

We have been awarded planning permission to build the anaerobic digester plant in Ellon which will turn our waste water into clean water, green gas, organic fertiliser and food grade CO<sub>2</sub>. The green gas and clean water produced will be reused in our brewery. And as the gas we produce will be more than we use, we will pump the surplus back into the grid, helping to decarbonise the UK's gas supply.



## CO<sub>2</sub> RECOVERY

Fermentation produces CO<sub>2</sub>. We are also installing a CO<sub>2</sub> recovery system which will capture the CO<sub>2</sub> produced during fermentation. We want to capture all of this CO<sub>2</sub> so that it does not escape into the atmosphere, and then use it downstream to carbonate our beers, reducing our material requirements.



## COLUMBUS HOP FARM

We work hard to source our ingredients as locally as possible, and we want to go one step further in Columbus. Our brewery is located on a beautiful 42-acre plot, so later in 2021 we will start installing our very own hop farm to ensure at least some of our ingredients don't have to travel between farm and brew kettle.



## ELECTRIC VEHICLE FLEET

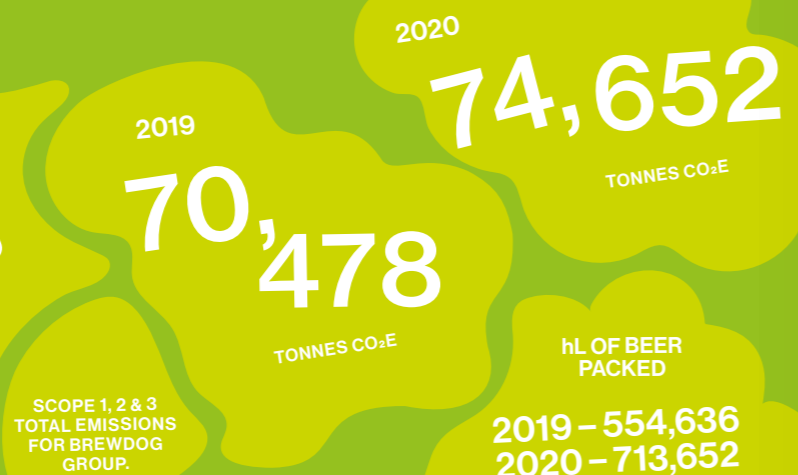
We invested in electric vehicles for our bar deliveries. We want to eliminate fossil fuels from our business and have begun changing all of our delivery vehicles for fully electric alternatives.



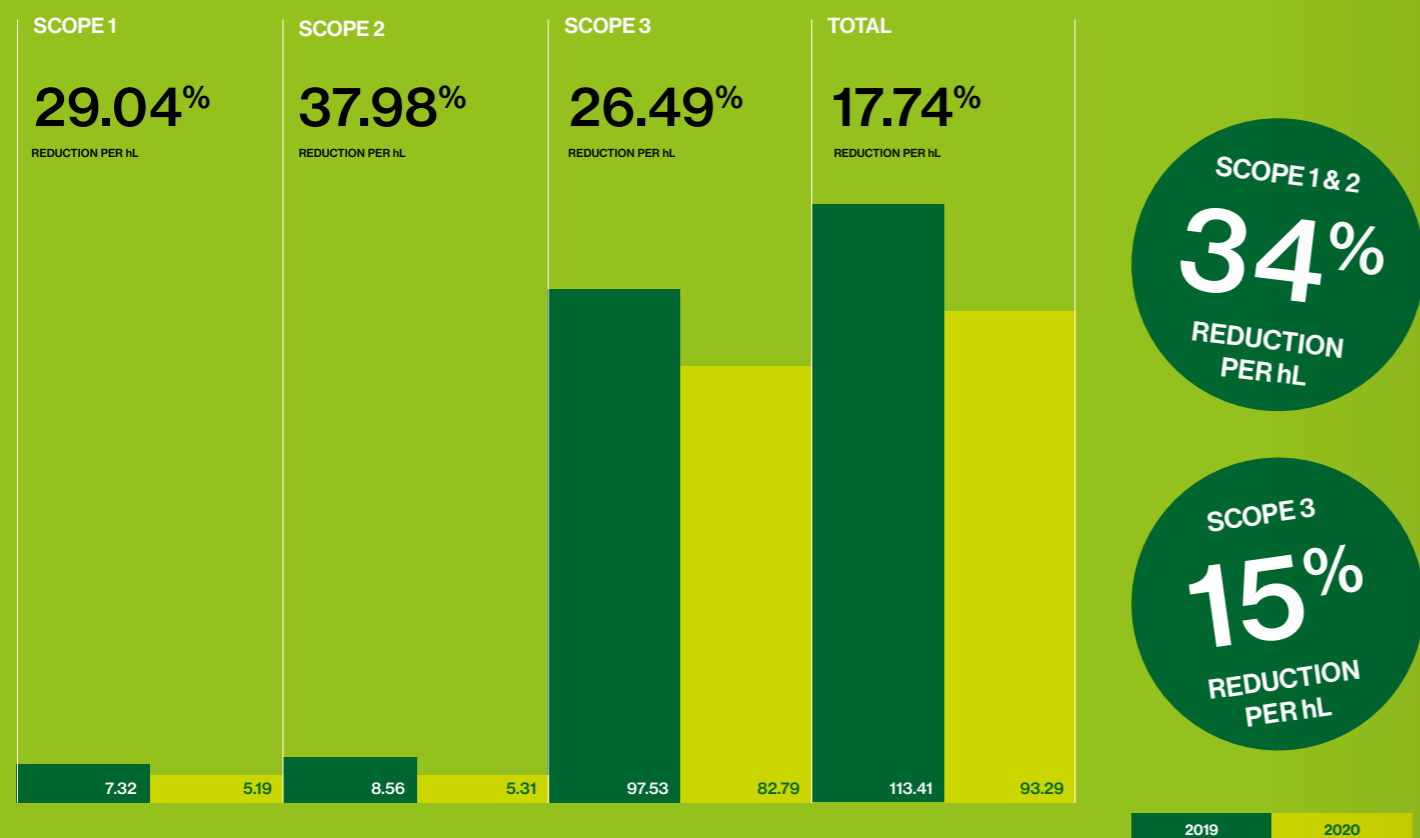
From April, we will be delivering beer directly to our London customers in the UK's first Electra 19-tonne vehicle.

# BREWDOG'S CARBON ASSESSMENT

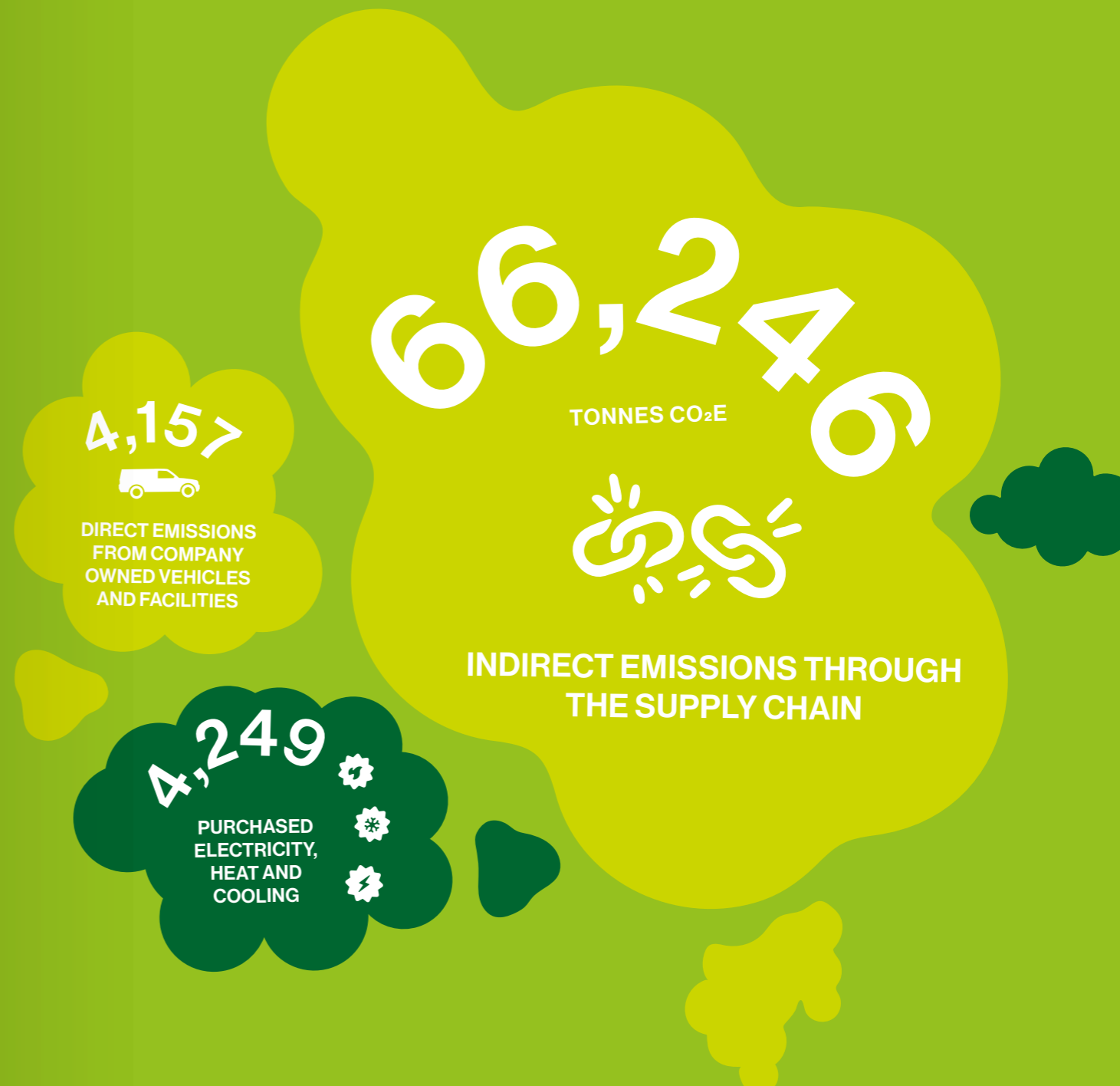
## GREEN HOUSE GAS EMISSIONS



Our carbon footprint accounting year runs from January – December. We looked at our carbon footprint hotspots with Mike's team, did a deeper dive and refined our 2019 baseline assessment. This has slightly increased the estimate from 67,951 tCO<sub>2</sub>e. COVID-19 affected our pubs and restaurants but increased home deliveries, taking our overall footprint up in 2020. Although our beer sales increased we became more energy efficient, decreasing our emissions per hectolitre of beer (hL).



## EMISSIONS 2020

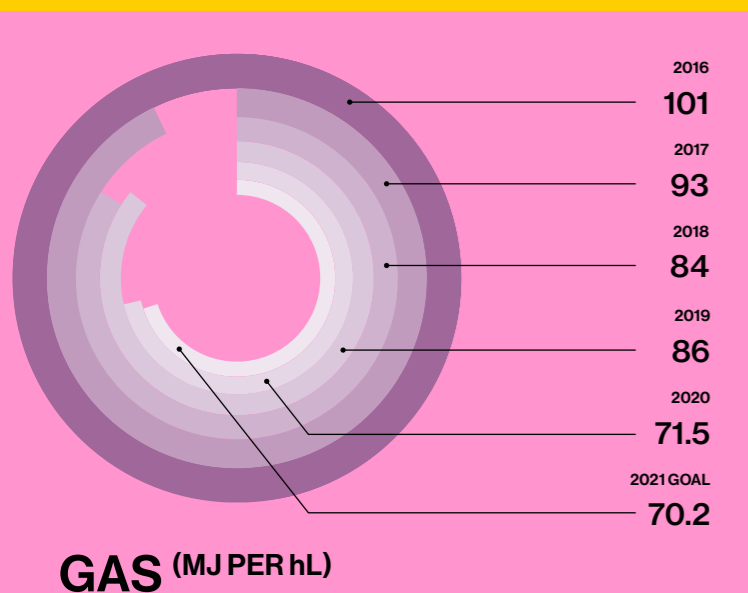


THE MORE BEER WE PRODUCE THE MORE ELECTRICITY, GAS AND WATER WE WOULD NATURALLY EXPECT TO USE. BUT OUR TEAM HAS BEEN WORKING EXCEPTIONALLY HARD ON A NUMBER OF INITIATIVES TO IMPROVE OUR EFFICIENCY. THE FOLLOWING DATA SHOWS THE IMPROVEMENT IN ELLON, WHERE 90% OF OUR BEER IS PRODUCED, OVER THE LAST 5 YEARS. OUR LEARNINGS AND BEST PRACTICES ARE THEN ROLLED OUT ACROSS ALL OUR OTHER SITES.

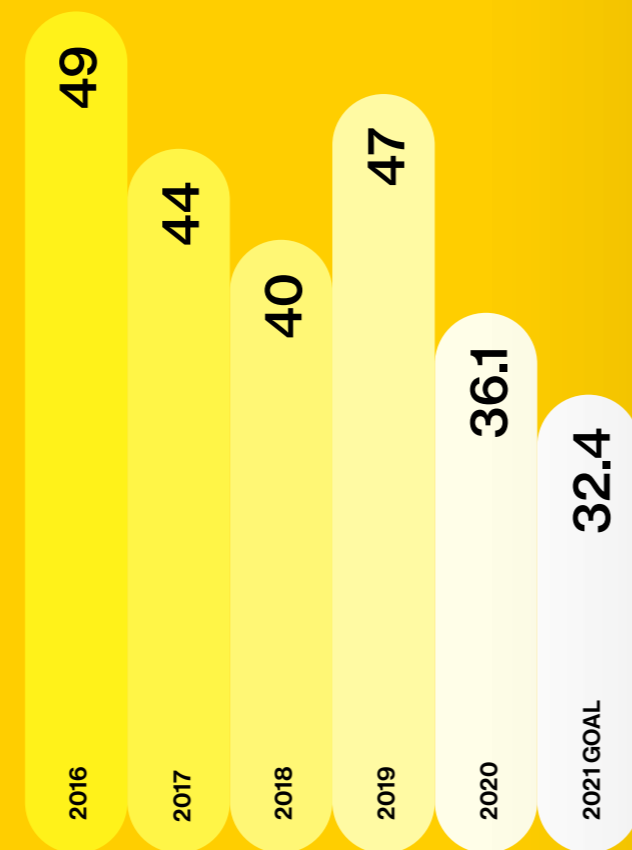
## ENERGY INTENSITY & WATER USE

Electricity and natural gas consumed in megajoules (MJ) per hectolitre (hL) of beer packaged.

Hectolitres (hL) of water to make 1 hL of beer packaged.



## ELECTRICITY (MJ PER hL)



WE BEGAN DOUBLE REMOVING ALL OUR CARBON ON THE 22 AUGUST 2020. OUR BEST ESTIMATE OF OUR TOTAL EMISSIONS FOR THAT YEAR IS 74,652 TCO<sub>2e</sub>. THIS MEANS WE HAVE TO REMOVE 2,871 TONNES CO<sub>2e</sub> FOR EACH OF THE 19 REMAINING WEEKS OF THAT YEAR. SO, WE HAD TO REMOVE 54,549 TONNES CO<sub>2e</sub>. ACTUALLY, WE REMOVED 59,622 TONNES JUST TO BE ON THE SAFE SIDE, AND TO TAKE ACCOUNT OF THE FACT THAT WE MIGHT RE-ADJUST OUR 2020 EMISSIONS ESTIMATE AT SOME POINT, AND IF IT GOES UP, WE DON'T WANT TO BE CAUGHT OUT.

### CARBON REDUCTIONS (TCO<sub>2e</sub>)

3,655

SUPPLY CHAIN IMPROVEMENTS

1,731

POWER BREWERIES WITH WIND

948

SPENT GRAIN TURNED INTO GREEN GAS

858

ENERGY EFFICIENCY PROGRAMME

167

F-GAS LEAK REDUCTION

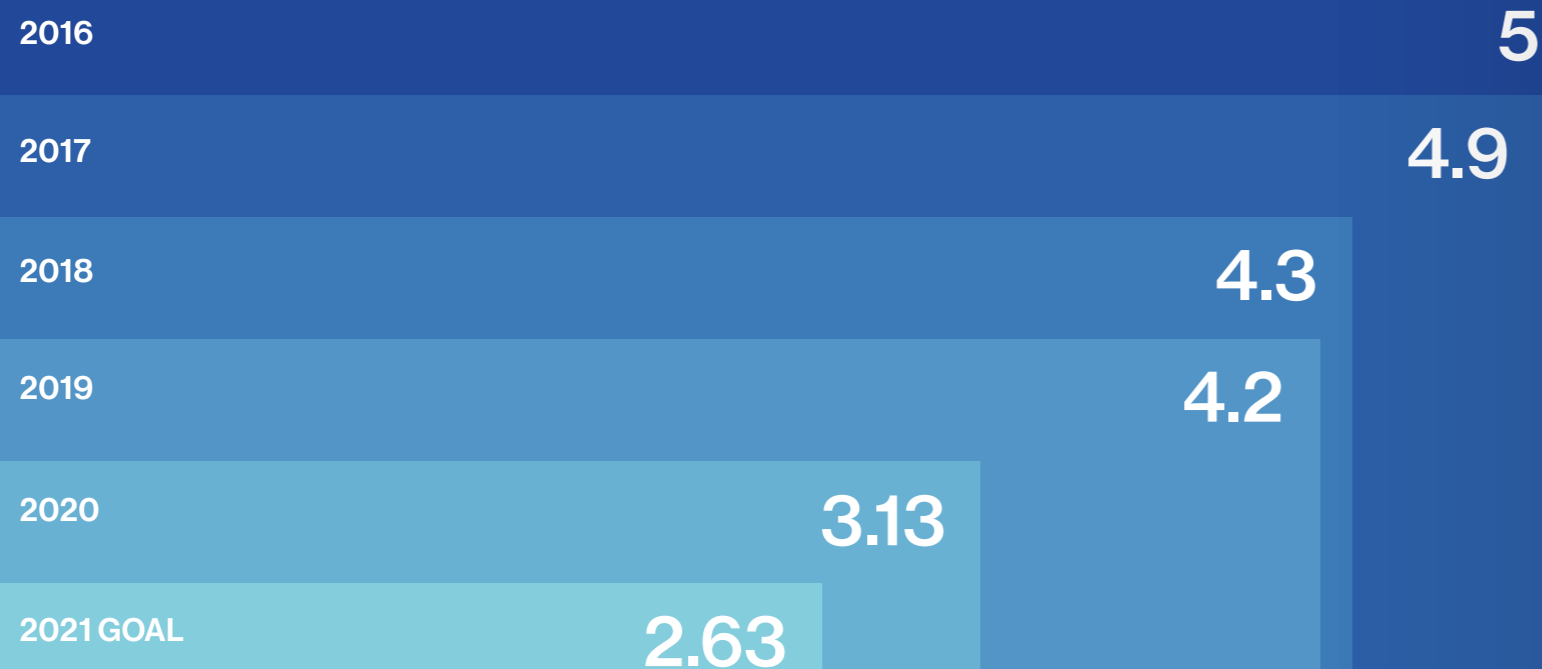
41

ELECTRIFYING DELIVERY FLEET

### CARBON REMOVALS (TCO<sub>2e</sub>)

59,622

HIGH QUALITY CARBON CREDITS

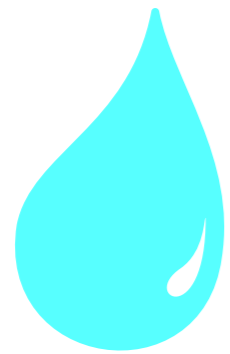


WATER  
(hL PER hL OF BEER)



# 2020\* EFFICIENCIES PER hL

\* 2020 VS 2016 REDUCTION



**WATER - 37.4%**

**ELECTRICITY ⚡ - 26.33%**



**GAS - 29.2 %**



# LOST

WE ARE FACING AN EXISTENTIAL CLIMATE CRISIS. WE HAVE ONLY A VERY BRIEF TIME WINDOW TO MAKE THE CHANGES NECESSARY TO SAVE OUR HOME PLANET. HUGE CHANGE IS NEEDED RIGHT NOW.



# FOREST

In August 2020, BrewDog became the world's first carbon negative beer business as we look to set a new standard in sustainability and hopefully inspire other businesses and consumers to join us on this journey.

As well as over £50m of investments in reducing our environmental impact as a company, we are also removing twice as much carbon from the atmosphere as we emit every year.

We wanted to tackle our emissions head on and remove our carbon from the air ourselves, and at the same time make an unprecedented statement to help drive the change our world needs.

# **INTRODUCING THE LOST FOREST:**

We purchased 9,308 acres of land in the Scottish highlands where we will embark on the single biggest native woodland establishment and peatland restoration project ever carried out in the UK.

The scale is staggering, the BrewDog Lost Forest is bigger than 17 actual countries.

Located just west of Aviemore, work will begin at the Lost Forest in August. We will be planting millions of native trees to create a bio-diverse broadleaf woodland and ecosystem.

Overall, the Lost Forest has the potential to sequester between 0.8 - 1 million tonnes of carbon over 100 years. Exactly how much depends on the outcome of surveys and consultations this Spring. This will help us decide the best approach to regenerating the landscape for a mosaic of habitats, including 'right tree, right place', and understand how the local farming and crofting community currently work the land. The Lost Forest is also going to be home to a hotel built from sustainable cabins, a campsite, a distillery, hiking and biking trails, as well as kayaking on our beautiful loch. We want the Lost Forest to enable people to reconnect with nature and by doing so become far more cognisant of the impact that we, as humans, are having on our planet.

At BrewDog, we have always tried to look at things through a new lens and challenged the status quo to think differently. And we have always put absolutely everything on the line for what we believe in. BrewDog was founded to change the world of beer.

Equity for Punks was launched to change the world of finance.

And The Lost Forest is being established to help drive the change that our world so badly needs.

There are no non radical solutions left.

Together we can set a new standard in sustainability and hopefully inspire other businesses and consumers to join us on this journey. More details on The Lost Forest will be released soon.

**WE WANT  
TO USE THE  
LOST FOREST  
AS A VEHICLE  
FOR ACTIVISM AS  
WE LOOK TO RAISE  
AWARENESS OF THE  
CLIMATE CRISIS WITH  
THE LOST FOREST,  
CITIZENS HELP DRIVE  
THE CHANGE OUR  
WORLD SO BADLY  
NEEDS.**

# WELCOME TO THE LOST FOREST



## THE TREES

OUR REFORESTATION PLAN WILL TRANSFORM THIS LANDSCAPE INTO A BIO-DIVERSE NATIVE WOODLAND. BY 2025, WE WILL HAVE PLANTED OVER 3 MILLION TREES INCLUDING SCOTS PINE, DOWNY BIRCH, SILVER BIRCH, ASPEN, WILLOW, OAK AND ALDER.



## LOST FOREST ECO CABINS

LOST FOREST CITIZENS WILL BE AMONGST THE FIRST TO EXPERIENCE THIS AMAZING LANDSCAPE AND STAY IN ONE OF OUR STATE OF- THE-ART ECO CABINS. ESCAPE TO THE IDYLIC SANCTUARY OF THE BREWDOG LOST FOREST AND IMMERSE YOURSELF IN OUR ENIGMATIC WOODLAND WORLD.

## THE PEATLAND

WE'LL ALSO BE RESTORING THOUSANDS OF ACRES OF DEGRADED PEATLAND BREATHING NEW LIFE INTO THESE SPECIAL AND UNIQUE WILDLIFE HABITATS FOR NATURE AND PEOPLE. LOW NUTRIENT PEATLAND SOILS ARE ESSENTIAL IN NURTURING PLANT BIODIVERSITY AND STORING CARBON.



## NANO DISTILLERY

FORAGING HAS ALWAYS BEEN CENTRAL TO THE BREWDOG DISTILLING ETHOS. NOW OUR MASTER DISTILLER HAS A WORLD OF UNIQUE AND LOCAL INGREDIENTS ON THE DOORSTEP OF OUR NEW NANO DISTILLERY SITUATED IN THE FOREST HEARTLAND.



# OUR INTERIM REMOVALS.



TO DOUBLE REMOVE ALL OUR CARBON UNTIL WE START PLANTING OUR LOST 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 FOR THEIR WIDER ENVIRONMENTAL AND HUMAN BENEFITS.

These are the carbon removal partners we are working with until the Lost Forest starts sequestering carbon:

PARTNER	PROJECT TYPE	REGISTRY	HOST COUNTRY
The Woodland Trust	Woodland	Woodland Carbon Code	UK
Carbon Neutral	Biodiversity	Gold Standard	Australia
Ribble Rivers Trust	Forestry / Landscapes	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.

## 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.



# EQUITY FOR PUNKS TOMORROW



EQUITY FOR PUNKS TOMORROW LAUNCHED IN SEPTEMBER 2020 WITH A RAFT OF SUSTAINABILITY PROJECTS IN ITS SIGHTS. WE SET OUT WITH A TARGET OF £7.5 MILLION, WITH EVERY SINGLE PENNY RAISED EARMARKED FOR INITIATIVES SUCH AS ELECTRIC VEHICLE FLEETS, ZERO-WASTE BREWDOG BARS, TURNING SPENT GRAIN INTO GREEN GAS AND MUCH MORE. WE BLASTED PAST OUR INITIAL GOAL IN JUST 6 WEEKS, AND UPPED OUR TARGET ACCORDINGLY. BY OUR SCHEDULED END DATE IN JANUARY, WE HAD MORE THAN DOUBLED OUR INITIAL GOAL, AND WERE ON TRACK FOR £20 MILLION.

Over 50,000 people have now invested in Equity for Punks Tomorrow, and we have extended the deadline, so there is still time to invest! Investors get access to a raft of awesome sustainable benefits

including extra discounts on vegan dishes in BrewDog bars, your own tree planted in The Lost Forest, ethical merch and vodka made from beer waste.

This is our community's chance to own a part of BrewDog, and help create a new benchmark in sustainability to help drive the change that we all need.

## THIS IS EQUITY FOR PUNKS TOMORROW

INVESTMENTS CAN GO DOWN AS WELL AS UP AND INVESTED CAPITAL IS AT RISK. INVESTORS SHOULD ONLY SUBSCRIBE FOR SHARES IN BREWD OG PLC ON THE BASIS OF THE INFORMATION CONTAINED IN THE OFFER DOCUMENT WHICH IS AVAILABLE FROM [WWW.BREWD OG.COM/EQUITYFORPUNKS](http://WWW.BREWD OG.COM/EQUITYFORPUNKS).

FOR ALL OF 2021, EVERY MULTIPACK OF BREWDOG PLANTS ONE TREE.



AS WELL AS THE LOST FOREST, WE ARE WORKING WITH THE EDEN REFORESTATION PROJECTS TO GENERATE A POSITIVE IMPACT ALL OVER THE WORLD.

Eden Reforestation Projects is a non-profit organization based in California, USA that works in developing countries to reduce extreme poverty and restore healthy forests. The organization employs thousands of local villagers and provides them with the employment, education, and tools necessary to

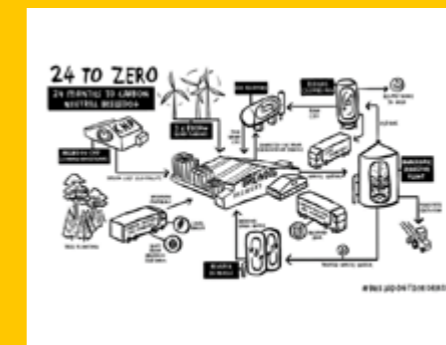
plant, grow, and protect millions of trees each year. Eden currently plants over 12,000,000 trees each month and achieved a milestone of planting 333 million trees in June 2020, with an aim to plant a minimum of 500 million trees each year by 2025.

# PLANET FIRST LOCALS

MADE POSSIBLE BY  
**BREWDOG**

**WE WANT TO HELP OUR CUSTOMERS REDUCE THEIR IMPACT ON THE PLANET. SO IN MAY 2021, WE WILL INTRODUCE PLANET FIRST LOCALS.**

Planet First Locals is a scheme, which will help our hospitality customers understand their Scope 1, 2 and 3 emissions and put in place a robust carbon reduction plan to cut their emissions. We have created the Planet First Locals pledge. For all our small business customers who take this pledge, we will remove their calculated carbon emissions from the atmosphere.



## STEP 1

**CALCULATE YOUR CARBON FOOTPRINT WITH SUPPORT FROM SMALL WORLD CONSULTING, WE WILL ESTIMATE YOUR SCOPE 1, 2 AND 3 FOOTPRINT.**

## STEP 2

**CARBON REDUCTION ROADMAP. TAKE THE PLANET FIRST LOCALS PLEDGE TO REDUCE EMISSIONS IN LINE WITH THE 1.5°C PARIS TARGET.**

## STEP 3

**BREWDOG REMOVES REMAINING CARBON FOOTPRINT THROUGH LOST FOREST AND DARK FOREST PROJECTS.**

**BUY ONE  
GET ONE  
TREE**

BREWDOG  
BREWED IN ELLON  
**PUNK  
IPA**  
POST MODERN  
CLASSIC  
OUR BETTER BEER  
FIERCELY DEFYING  
ALC 5.4% VOL

BREWDOG.COM/TREE

swet

**EVERY MULTIPACK OF BREWDOG PLANTS ONE TREE**



# WELCOME TO THE WORLD'S MOST SUSTAINABLE BEER CLUB.



Rather than shipping beers all over the world like other beer clubs, with BrewDog & Friends, we collaborate with amazing brewers to make their beers at our brewery. This means much fresher beers for you and much fewer emissions for the planet. And we double offset all the emissions we do create by planting trees in our very own forest.

FIND OUT MORE AT:  
[BREWDOG.COM/UK/BREWDOGANDFRIENDS](http://BREWDOG.COM/UK/BREWDOGANDFRIENDS)

EIGHT BEERS  
 DELIVERED TO YOU  
 EACH MONTH

BREWED IN OUR CARBON  
 NEGATIVE BREWERY

WHERE WE  
 COLLABORATE  
 WITH BREWERIES  
 WE LOVE

THE WORLD FROM ALL  
 AROUND

BRINGING  
 THEIR BEERS  
 TO YOU

WITHOUT THE  
 UNNECESSARY  
 TRANSPORT MILES

GOOD FOR  
 YOUR PLANET  
 AND YOUR  
 PALATE

CREATING

THE WORLD'S MOST

SUSTAINABLE

BEER CLUB

## BREWDOG IS OFFICIALLY A CERTIFIED B CORP

Certified B Corporations are companies that use the power of business to build a more inclusive and sustainable economy.

They meet the highest verified standards of social and environmental performance, transparency and accountability. As of 2018, there are more than 3,500

B Corps in 130 industries and 60 countries around the world.

To celebrate, we released a tropical hop pilsner. 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.

Our world needs change now more than ever. From working with the best experts in the world, to double offsetting all our emissions, from putting our workers and community at the heart of our business,

to waging a war on waste; by 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.

It's time to drink and think responsibly.

AND TIME STARTS NOW. UNITED, WE CAN CHANGE THE WORLD.



# 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. 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.

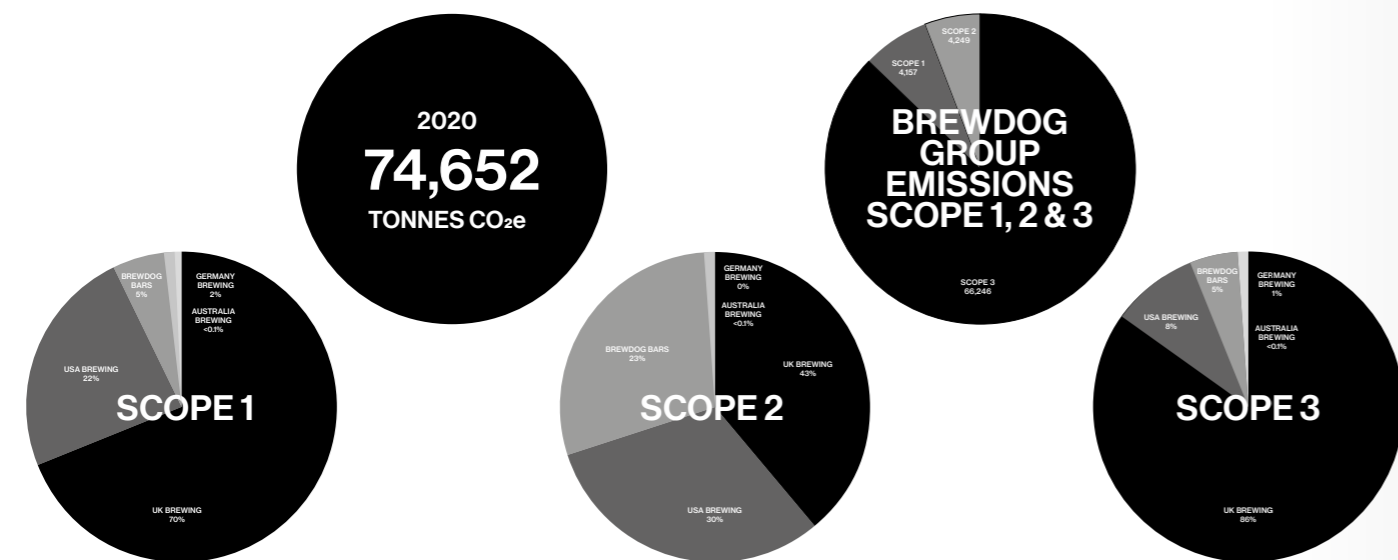
We steadfastly believe this is the only real way to count carbon and calculate our true impact. We have also broken our business down into the following categories:

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

## BREWDOG'S 2020 CARBON FOOTPRINT

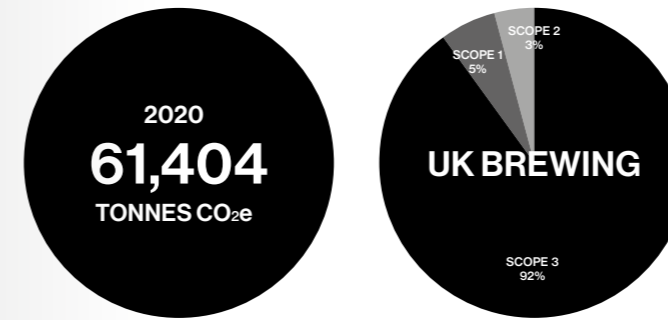
The total carbon footprint of our business in 2020 was 74,652 tonnes CO<sub>2</sub>e.

BUSINESS UNIT	2020 OUTPUT hL	SCOPE 1 Tonnes	SCOPE 2 Tonnes	SCOPE 3 Tonnes	TOTAL TCO <sub>2</sub> e
UK Brewing	713,652	2,911	1,813	56,680	61,404
USA Brewing	73,715	933	1,409	5,562	7,903
Germany Brewing	11,857	72	—	895	966
Australia Brewing	956	33	48	72	153
BrewDog Bars	n/a	209	979	3,037	4,225
<b>TOTAL (TCO<sub>2</sub>e)</b>		<b>4,157</b>	<b>4,249</b>	<b>66,246</b>	<b>74,652</b>



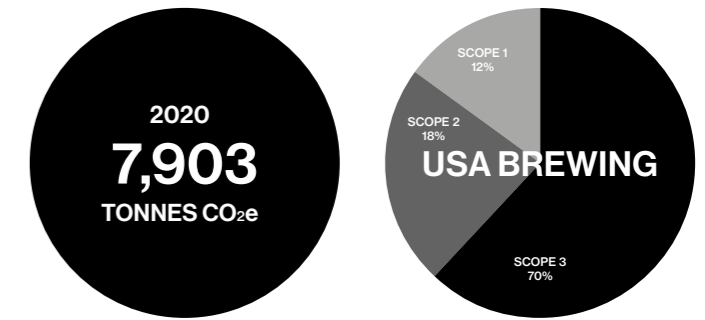
## UK BREWING

Scope 1 & 2: 4,724 tonnes CO<sub>2</sub>e  
Scope 3: 56,680 tonnes CO<sub>2</sub>e



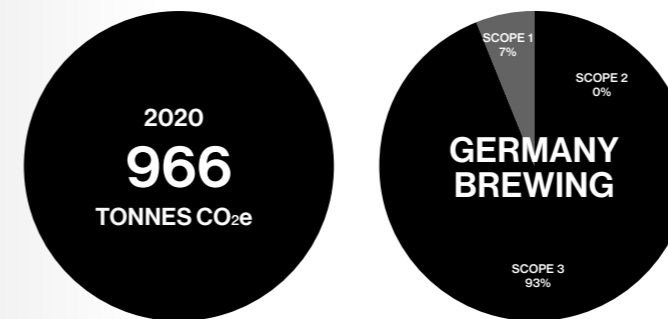
## USA BREWING

Scope 1 & 2: 2,341 tonnes CO<sub>2</sub>e  
Scope 3: 5,562 tonnes CO<sub>2</sub>e



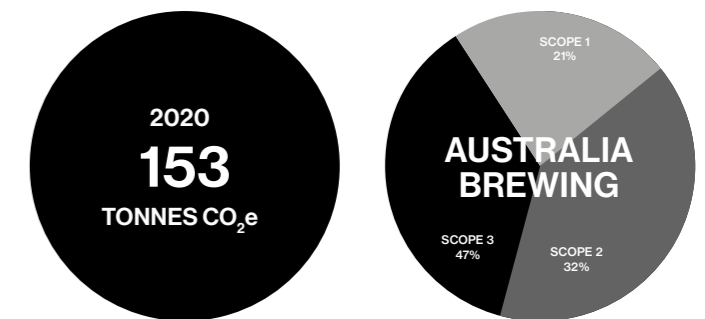
## GERMANY BREWING

Scope 1 & 2: 72 tonnes CO<sub>2</sub>e  
Scope 3: 895 tonnes CO<sub>2</sub>e



## AUSTRALIA BREWING

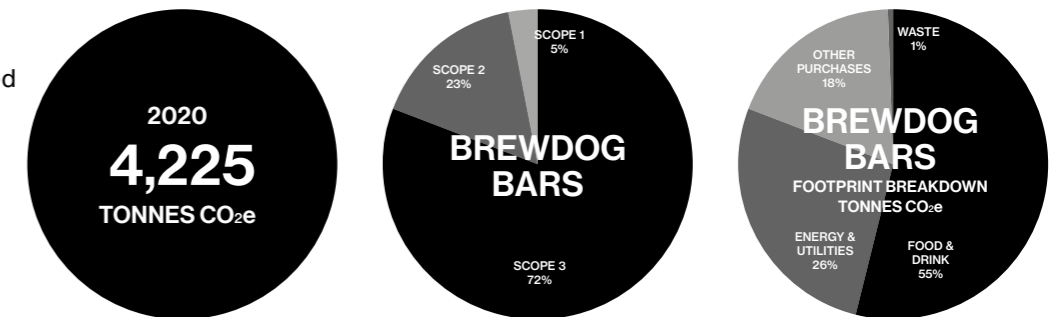
Scope 1 & 2: 80.6 tonnes CO<sub>2</sub>e  
Scope 3: 72 tonnes CO<sub>2</sub>e



## BREWDOG BARS

We have 83 BrewDog owned retail locations globally.

Scope 1 & 2: 1,888 tonnes CO<sub>2</sub>e  
Scope 3: 3,037 tonnes CO<sub>2</sub>e



## DOUBLE REMOVAL

Since 22 August 2020 we have been removing 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.

