HARE EARTH CREATING

SUSTAINABILITY REPORK

BREWDOG'S PUNKED-UP-PLAN

GROW HOPS IN



ENSURING WE HAVE A PLANET TO BREW BEER ON.

IN 2021, THE IPCC - AN INTERGOVERNMENTAL BODY OF THE UNITED NATIONS - STATED THAT IT IS UNEQUIVOCAL THAT HUMAN INFLUENCE HAS WARMED THE ATMOSPHERE, OCEAN AND LAND.

IN ORDER TO AVOID CLIMATE CATASTROPHE. WE MUST LIMIT WARMING TO 1.5°C, WE ARE CURRENTLY ON TRACK TO INCREASE GLOBAL TEMPERATURES BY 2.7°C.

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.

DEAR BREWDOG

DEAR BREWDOG

THE COMMITMENTS MADE AT COP26 FALL DESPERATELY NEEDED.

WHAT DOES THAT MEAN FOR US? It means we need to push even harder for change. To look on the positive side, the push even had der for that change is growing faster than ever, 100,000 discontented people on the streets of Glasgow might have been the best thing to have come out of the COP.

"WILL THE ECOSYSTEM TIP FIRST OR WILL HUMANS WAKE UP AND INSIST ON THE HUGE SYSTEMIC CHANGES THAT ARE REQUIRED?."

WHAT WE LEARNED IN NOVEMBER, IN CASE WE DIDN'T KNOW IT ALREADY, IS THAT LEADERSHIP ON CLIMATE AND ENVIRONMENT CAN'T ALL COME FROM OUR GOVERNMENTS, Whilst we can't do without their help, it is

clear that they simply aren't up to the job without people and businesses – that's us – pushing them really hard.

We now are in a flat out race between tipping points. Will the we now are in a natiout race between upon upon upon upon upon to vini the ecosystem tip first or will humans wake up and insist on the ecosystem up urst or will numer is wake up and itsist on the huge systemic changes that are required? I don't know, but

So please do not ever vote for a politician that does not properly and consistently push for action on the climate and wider environmental emergency. Whenever you can, please try to buy only from companies that are pushing presse uy to buy only monitoring lines that are pushing hard in every way they can. Please make sure everyone you know understands that this is not a side issue. Given the situation, please even think about taking to the streets (ii Situation, prease even unin about taxing to the objects university statishow total respect for all). Idon't say that lightly. WE HAVE TO BRING ABOUT CHANGE.

I'm proud to be supporting BrewDog in their efforts. There have been ups, downs, and stacks of learning. There are now plans in place and actions already underway to take 35% out of all emissions (including the supply chain, which by the way or an emissions findibuling the supply chain, which by the way is essential for every company to include) over a period of just 4 years. That is steep carbon cutting and it is happening right now, not just a distant plan. And while they do that, we will plan the next round of deep carbon cuts. And at the same time they are funding and organising the careful restoration of land for multiple benefits. Removing twice as much carbon as they emit is just one of those. It doesn't stop there, because every entitis just orie or triose, it does not stup under, because every company has a responsibility to push for change in every way they can, You'll readhere about some of the ways BrewDog are engaging customers, drinkers and suppliers. And some of the best stuff is still just bubbling away as ideas.

NOBODY'S PERFECT, BUT IF EVERY COMPANY TOOK IT ON LIKE THIS, WE'D GET THERE.



PROFESSOR MIKE BERNERS-LEE Lead Scientific Advisor BrewDog

THE TIME IS NOW THE TIME IS NOW THE THE



WE ARE PRIORITISING REDUCING **OUR EMISSIONS AND INCREASING OUR SUSTAINABILITY**

TO MAKE EARTH GREAT AGAIN. FAST.

A NOTE FROM BREWDOG'S

DESPITE A RECORD-BREAKING NUMBER OF DELEGATES ARRIVING IN GLASGOW FOR COP 26, AND AS THE WORLD WATCHED ON WITH HOPE. **OUR LEADERS WERE ONCE AGAIN NOT** CAPABLE OF TAKING THE REQUIRED STEPS TO SAVE OUR PLANET LEAVING THE CRUCIAL TARGET OF 1.5 DEGREES **CELCIUS IN TATTERS.**

It should also be noted that even with limiting temperature rise to 1.5 degrees the consequences would be very grim. The Intergovernmental Panel on Climate Change (IPCC) predicts 1.5 degrees will see extreme heatwayes, oceans rising, and the destruction of 70 to 90 per cent of coral reefs. Yet we ended up with an agreement, where even if all governments meet their 2030 commitments, experts predict we will see 2.7 degrees of warming.

Time and time again our politicians have proven themselves incapable of addressing the gravest threat that humans have ever faced.

Once again, we remain very firmly of the view that if we are going to avert a climate disaster then it is going to be down to cutting edge businesses working hand in hand with the world's best scientists to lead that change.

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How the public spend their money, and the companies they choose to support week in, week out will have a far bigger impact on our climate change battle than who they choose to vote for every 4 years.

With that in mind we have spent 2021 doubling down financially on our sustainability commitments and have continued to make huge investments across our business to reduce our environmental impact and work has now started on the huge carbon removal project that is our Lost Forest.

MAKING SURE THAT FUTURE

ENFAST, OLLANDER OLLA

WE'RE TARGETING A 35% CO₂e REDUCTION* BY 2023 COMPARED TO OUR 2019 BASELINE!



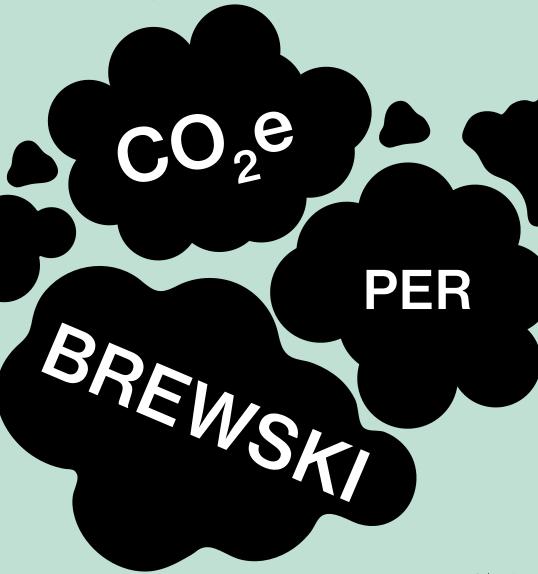
FOR EVERY BEER WE MAKE, WE ALSO REMOVE TWICE THE CO₂e THAT WE EMIT!**

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

**See final page for details regarding our carbon removal partners.

By 'Our Carbon' we mean ALL the greenhouse gasses in both our operations and our supply chain. So that includes everything that is involved in creating our beer and getting it to our customers; ingredients, packaging, transport, and everything else that we do or buy.

AT ELLON WE'VE BEEN DOING OUR BEST TO INCREASE THE AMOUNT OF BEER WE PRODUCE FOR YOU LOVELY FOLK, WHILST KEEPING OUR EMISSIONS AS LOW AS POSSIBLE.



In 2019 we assessed all Scope 1,2 and 3 emissions of our business and related this to our beer production. [This includes all direct emissions which occur at our breweries and bars, the emissions from the electricity we purchase, as well

as the emissions of our entire upstream and downstream supply chain.] We carried out an interim estimate in 2020 and will shortly be conducting our most detailed emissions assessment yet for the year 2021.

Our aim is to decrease the emissions per litre of beer as fast as we possibly can.

CO, e PER BREWSKI

STATE OF THE CO2 e /hL

93-3-Kg co₂e/hL

2021

2020 (ESTIMATE)

COMING FOR MEGA 4.0

TARGET BY 2023

137KQ
co,e/hL

From 2019 to 2020 we reduced our CO₂e per hL by 15%. Between 2020 and 2022 we aim to reduce our CO₂e by a further 20% per hL of beer produced.

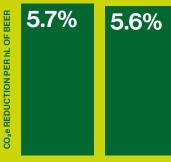
Read on to discover HOW we are reducing our carbon footprint.

DURING 2022 WE AIM TO REDUCE OUR TOTAL EMISSIONS PER hL OF BEER BY A FURTHER 20%!*

ESTIMATED FURTHER BREWERY CARBON SAVINGS FROM SELECTED ACTIONS

from 24% of sales

to 11% of sales



Generate biogas for own use

3%

Reduce bottles

Optimisation

Optimisation of malt source locations 0.2%

Cardboard reduction in packs and bulk packaging

The bar chart displays some of our top carbon cutting activities that we are focusing on during 2022. The development of our own anaerobic digestion facility is estimated to reduce the $\rm CO_2e$ per hL by the largest percentage 5.7%, with reducing our glass usage from our packaging.**

OPTIMISING THE LOCATION OF WHERE WE SOURCE OUR MALTED GRAINS REDUCES THE CO2e PER hL BY A FURTHER 3%.

#MARGINALGAINS

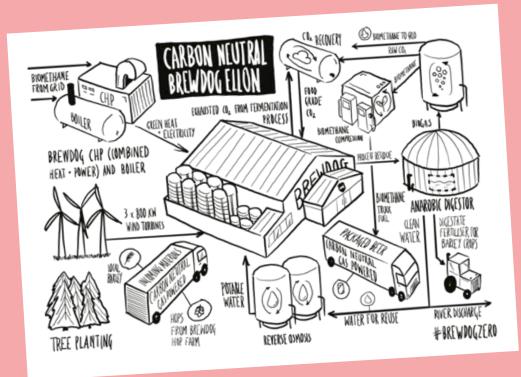
We will be seeking to electrify more of our deliveries. We will also be reducing our cardboard consumption to save an extra 0.2%. These are small reduction activities but they can easily be achieved. We are also looking at ways to cut our transport carbon by reducing mileage and increasing delivery efficiency. In our bars we are looking at various ways to cut the footprint of our food and increasing the energy efficiency.

As we keep making these incremental steps forward towards reducing our emissions, they'll total a significant improvement over the years.

#onepercentbettereachday
#bebetter #HWPO.

*Compared to 2020 $\rm CO_2e$ per hL estimate. ** 5.6% saving assumes that output in kegs returns to the same volume (hL) pre-pandemic.

24 MONTHS TO ZERO



AT BREWDOG WE HAVE
SOME INCREDIBLY
AMBITIOUS PLANS TO
REDUCE OUR EMISSIONS
AND UTILITIES AS MUCH
AS POSSIBLE.

WE AIM TO HAVE ZERO OPERATIONAL EMISSIONS BY 2023!

Our vision includes sourcing direct renewable electricity from wind turbines, building our own AD plant to provide green gas, food grade CO₂ and recycled water, a biogas CHP station to provide further green heat and electricity as well as having a fleet of electric and green gas powered vehicles

BREWDOG'S CARBON REDUCTION PLAN INCLUDES



AD PLANT

With our AD plant, we will be leading the European Brewery industry in waste management. We are currently in the proces of completing Phase 1.



CO, RECOVERY

During the fermentation process within the beer brewing cycle, CO₂ is directly produced. We're installing a carbon capture facility to capture the CO₂ produced, so we can feed this back into our delicious beer.



ELECTRIC TRUCK

We deliver our beer directly to our London customers in the UK's first electric 19-tonne vehicle. The electric truck has 100 miles of range and DOUBLE the peak torque of a Bugatti Chiron!



DIRECT WIND POWER

We're working with a local farmer to gain a direct wire from his wind turbine to our brewery in Ellon to reduce our Scope 2 emissions.

THE AD PLANT

ANAEROBIC DIGESTION (AD) IS A SERIES OF BIOLOGICAL PROCESSES IN WHICH MICROORGANISMS **BREAK DOWN BIODEGRADABLE** MATERIAL (IN OUR CASE, OUR ORGANIC PROCESS RESIDUES) IN THE ABSENCE OF OXYGEN. THE MAIN PRODUCTS ARE BIOGAS, WHICH WE WILL BE PROCESSING INTO GREEN GAS (BIOMETHANE), TRANSPORTATION FUELS, PLUS CLEAN WATER AND CROP NUTRIENTS

We are currently using world leading AD technology to process our organic process liquors. With our on-site AD plant, we are leading the European brewery industry in co-product management. We are currently in the process of completing Phase 1, which will initiate the replacement of natural gas with biomethane in the brewery.

PHASE 1

Building the first of two AD tanks, plus aerobic water treatment and planting the ecological system. Green gas (biogas) will be ready to be utilised in the Ellon brewery from February 2022. Phase 1 will see 400 m³ of feedstock being treated per day, with green gas output increasing to 250m³ per hour.

PHASE 2

The installation of the second AD tank and carbon capture system. In Phase 2, the aim is to increase capacity to treat 800m³ of feedstock per day and produce 500 m³ of green gas per hour and replace all imported carbon dioxide with recycled gas from our co-products, within the next 2-3 years.

ELECTRIC TRUCK



OUR ELECTRIC TRUCK, DELIVERING BEERS ACROSS LONDON, IS THE WORLD'S FIRST OF ITS KIND. AND WE RECKON IT BOASTS ENOUGH FACTS TO KEEP CAPTAIN SLOW HAPPY!

- 1. The battery on our electric vehicle has 225 kWh capacity. This provides 100-mile range in central London! In comparison, this capacity could provide enough power to run the average home for 22 days.
- 2. The vehicle will charge typically in 5 hours at 40 kWh between shifts.
- 3. Our vehicle, which would normally be restricted to carry a maximum of 18,000 kgs is allowed an extra 1,000 kgs due to being zero emission.
- 4. The electric truck has over double the peak torque as a Bugatti Chiron, 3,400 Nm! This is also 1,250 Nm of torque greater than our standard tractor units which are able to pull 44,000 kgs!
- 5. Our vehicle also has a temperature controlled body. The fridge is also powered electrically and can chill the whole load to frozen temperatures while remaining very quiet and emission free.

OUR TRUCK REDUCES TRANSPORT EMISSIONS BY OVER 500 kg CO,e PER WEEK!

CARBON CAPTURE AND RE PURPOSE

MALTING

BARLEY IS GERMINATED. IT IS SOAKED IN WATER UNTIL IT FORMS A ROOT. ENZYMES -MOLECULES THAT SPEED UP REACTIONS - ARE FORMED AND START TO BREAK DOWN SUGARS AND PROTEINS IN THE BARLEY.

DURING THE BREWING OF BEER, WE MUST FERMENT. THE LIQUID WORT TO MAKE DELICIOUS BEER. THE FERMENTATION PROCESS CREATES ALCOHOL. BUT IT ALSO CREATES CARBON

KILNING

THE BARLEY IS DRIED TO STOP GERMINATION. INCREASING THE TEMPERATURE AT THIS STAGE CAN LEAD TO CARAMEL AND BITTER NOTES IN BEER.



MASHING

HOT WATER IS ADDED TO THE GRAIN. HIGH TEMPERATURES ALLOW THE ENZYMES TO FACILITATE CHEMICAL REACTIONS TO CONVERT COMPLEX SUGARS, SUCH AS STARCH, INTO SIMPLE SUGARS, AT THE END OF THIS PROCESS A MALTY LIQUID CALLED WORT IS PRODUCED, WHICH IS THEN SEPARATED FROM THE GRAIN.

MILLING

THE GRAIN IS GROUND INTO FINER PIECES TO EXPOSE MORE OF THE GRAIN'S SURFACE TO THE MOLECULES THAT WILL BE INVOLVED IN THE CHEMICAL REACTIONS THAT OCCUR IN THE BREWING PROCESS.

BOILING PROCESS

HOPS ARE THE FLOWER OF THE HOPS PLANT, HUMULUS LUPULUS. HOPS ADD FLAVOUR AND THE AROMA TO BEER, AS WELL AS BITTERNESS THAT PEOPLE LOVE OR HATE. THE BITTERNESS IS DUE TO A COMPOUND CALLED ALPHA ACID. THE WORT IS BROUGHT TO A BOIL AND THE HOPS ARE ADDED. DIFFERENT STRAINS OF HOPS CAN ADD DIFFERENT FLAVOUR PROFILES TO BEER, SUCH AS CITRUS OR PINE.



FERMENTATION

YEAST, A SINGLE-CELL ORGANISM OFTEN USED TO MAKE BREAD, IS ADDED TO THE WORT, THE YEAST EAT UP THE SUGAR, WITH THE HELP OF THE ENZYMES THAT WERE ACTIVATED IN PREVIOUS STEPS. AND RELEASE CARBON DIOXIDE AND ETHANOL. THIS PROCESS CAN TAKE BETWEEN 2-10 WEEKS DEPENDING ON THE TYPE OF BEER **BEING MADE.**

AT BREWDOG, WE WILL BE CAPTURING THE CARBON DIOXIDE WE PRODUCE FROM **FERMENTATION (AND OUR** AD PLANT) TO CARBONATE
OUR BEER.



THE BEER IS CANNED OR KEGGED FOR US ALL TO ENJOY.

A MASSIVE THANK YOU TO OUR EQUITY PUNK INVESTORS WHO ENABLED THE PURCHASE OF THE LOST FOREST IN 2021.

THANK YOU!

ACRES
(THAT'S NEARLY 15 SQUARE MILES)

Close to Aviemore this incredibly beautiful landscape borders the Cairngorms National Park in the Scottish highlands just west of Aviemore which locals call Kinrara.

We have partnered with employee-owned Scottish Woodlands to plan and deliver on our 5-year peatland restoration and woodland creation programme.

The peatland restoration and woodland creation is occurring at a staggering scale, and is being supported via NatureScot's Peatland ACTION Fund, and Scottish Forestry's Grant Scheme. Restoration of degraded peatlands is a key priority for the UK Government's Sixth Carbon Budget for the UK's path to Net Zero.

FOREST FUTURE

THESE ARE JUST THE START OF OUR PLANS TO OPTIMISE THE OPPORTUNITIES FOR NATURE, CLIMATE AND PEOPLE BUT THERE IS MUCH MORE WORK TO BE DONE. 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.

2 PHASES OF WOODLAND CREATION

WE ARE ALSO PLANNING INITIALLY FOR TWO PHASES OF WOODLAND CREATION SEEING THE LOST FOREST COME INTO REALITY, BASED ON THE PRINCIPLE OF 'RIGHT TREE, RIGHT PLACE'. SUBJECT TO APPROVAL OF OUR IMMINENT APPLICATION TO THE FORESTRY GRANT SCHEME WE AIM TO PLANT OVER 1.1 MILLION NATIVE TREES TO CREATE A BIO-DIVERSE BROADLEAF WOODLAND AND ECOSYSTEM ACROSS 760 HA.

4 PHASES OF PEATLAND RESTORATION

WE ARE PLANNING FOR FOUR PHASES OF TO A WIDER PROGRATION. THESE CONTRIBUTE TO A WIDER PROGRAMME OF WORK FOR FOR THE WHOLE MONADHLIATH PROJECT AREA PEATLAND ARE THE LARGEST NATURAL IMPORTANT FOR WATER REGULATION. IMPORTANT FOR WATER REGULATION DUE TO BRAINAGE AND LAND MANAGEMENT PRACTICES OVER THE LAND MANAGEMENT TO AVOID OVER PENDING LARGELY RESTORING THE LAST HALF-CENTURY, BY GAS EMISSIONS BEING RELEASED INTO THE LAST MONADHE REGULATION TO AVOID OVER 200,000 TO CO. GREENING ABLE ATMOSPHER IN BEING RELEASED INTO THE UNITS IN TOTAL OVER 100-YEAR PERIOD) AND CREASE SOIL CARBON STOCKS

EXTENSIVE SURVEYS

TAKING OUR RESPONSIBILITIES SERIOUSLY WITH THE BENEFIT OF SCOTTISH WOODLAND'S EXPERIENCE IN RURAL DEVELOPMENT AND SUSTAINABLE LAND USE WE HAVE AND SUSTAINABLE LAND USE WELLS.
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 MANAGEMEN I 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.

TALKING TO PEOPLE

MAKING SURE OUR PLANS SUPPORT
CLIMATE ADAPTATION AND MITIGATION,
WHILST BEING SENSITIVE TO THE
AND SPECIAL LANDS.CAPE. COMMUNITY,
IS AND SPECIAL LANDS.CAPE. DESIGNATIONS
PROCESSES HAVE TAKEN TIME.
SCOTTISH WOODLANDS ARE LIAISING
OF STATUTOR VAMD NON-STATUTORY
APPLICATIONS ON OUR BEHALF IN
APPROVALS UNDER THE PEATLAND
APPROVALS UNDER THE PEATLAND
ACTION AND FORESTRY GRANT SCHEME.

| TIMESCALE | (INDICATIVE) APR 2021 —

APR 2022 – MAR 2023

APR 2023 — MAR 2024 APR 2024 — MAR 2025

PEATLAND RESTORATION

PHASE 1

PHASE 2

PHASE 3

PHASE 4

WOODLAND CREATION PHASE1

PHASE 2

Our projects will be registered on the UK Land Carbon Registry

COLUMBUS, OHIO

WE'RE NOT JUST CONCENTRATING ON OUR UK CARBON!

HYPER LOCAL EXPERIMENTAL BREWING

ACRE PLOT

Out in Columbus Ohio, USA, we have our American brewery located on a beautiful 42-acre plot.

to plant 2500. Tipping our hat (or lifting our kilts) to the Lost Forest back in Scotland.

ACRE HOP FARM

Our brewery has its own hop farm! 1.5 Acres of locally grown hops planted with the Ohio hop growers guild. 2021 was the first harvest and the hops are to be used for crafty experiments.

SOLAR POWERED

In March 2022 we are installing a solar PV We've planted 700 trees, with a plan solution to power our entire brewery.

CARBON CAPTURE

Currently we are investigating the feasibility of installing a CO, capture facility and heat recapture system to help reduce our scope 1 and 2 emissions.

BRISBANE

WE ARE FOSSIL FUEL FREE & PLASTIC FREE

SOLAR-PANELLED **BREWERY ROOF**

Producing 16 MWh of energy per month.

For any electricity we pull from the grid (when we can't use solar), we're supplied with AGL's "Carbon Neutral" energy option.

PLASTIC FREE

We utilise cans as much as possible, pack in cardboard boxes, and use steel returnable kegs.

BREWING WITH THAT M.E.G.A EFFICIENCY

99%

BOTTLE REUSE

'Every bottle help's' is an initiative by the German government to ensure no glass goes to landfill and is always collected and reused.

ROUNDS OF USE

All containers filled have a deposit and must be given back. A bottle will do 30 rounds.

CAN RECYCLING RATE

95% of our BrewDog cans make it to recycling to become cans again.

ELECTRICITY

- All electricity we purchase is from renewable sources.
- We're currently investigating the opportunity to install solar panels on our roof.

GAS

- We now receive all our gas from renewable sources from the 1st June 2021.

ELECTRIC VEHICLES

 All vehicles in our sales fleet will become fully electric within the next 12 months

In Berlin we take sustainability very seriously. Throughout our entire supply chain we ensure planet before profit. Take a look at our experimental beer using raspberries that would have otherwise gone to waste.



BREWED-IN-BERLIN

DRIVEN-BY-PASSION

UNITED-BY-BREWDOG

SOME OF THE MOST RECENT EXAMPLES OF HOW WE PLACE PLANET, PEOPLE AND POSITIVITY ABOVE PROFIT.

RETAIL ECO BOARD

OUR IN HOUSE TEAM OF ECO WARRIORS
HELPING US PUSH SUSTAINABILITY
EVERYDAY ACROSS OUR SITES.

WHAT THEY'VE BEEN UP TO?

REDUCING OUR SCOPE 2 EMISSIONS

SWITCHING OUR BARS TO SMART METERS

REDUCING OUR SCOPE 3 EMISSIONS

INTRODUCTION OF GLASS CRUSHERS ON SITE TO REDUCE GLASS COLLECTIONS

SORTING AND REDUCING OUR WASTE PURCHASING ECO FRIENDLY CONSUMABLES



FOOD AND BEERS ON TOO GOOD TO GO

WE WANT TO WORK WITH KEY BAR & PUB PARTNERS TO HELP THEM REDUCE THEIR EMISSIONS AND INCREASE THE POSITIVE IMPACT WE HAVE ON OUR PLANET. PLANET FIRST LOCALS IS OUR PLANET (NOT PROFIT) FIRST INCENTIVE TO WORK



To qualify as a key partner, you iust need to stock our core product range. Once stocked, you'll qualify for the planet first local scheme.

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 remaining calculated carbon emissions from the atmosphere.



STEP1

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.



STEP3

BREWDOG REMOVES REMAINING CARBON FOOTPRINT THROUGH HIGH QUALITY NATURE-BASED PROJECTS.

CIRLLY A CERTIFICATION OF THE PROPERTY OF THE

Certified

Corporation

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.



SUPPLIER ENGAGEMENT

BREWDOG FOR ACHIEVE NET ZERO, OUR SUPPLIERS AND FRIENDS MUST ACHIEVE IT TOO!

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

Set ambitious emissions reduction targets and agree these with our key suppliers.

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.

Report initial results and share success stories with suppliers, customers and the Zero Carbon Forum.

FOR THE LOVE OF PEAT

PEATLANDS ARE GLOBALLY IMPORTANT

PEATLANDS COVER JUST

OF THE WORLD'S SURFACE¹

... YET HOLD NEARLY

OF THE SOIL CARBON

OF THE WORLD'S BLANKET BOG

BOTH THE UK PEATLAND STRATEGY (2018-2040) AND THE SIXTH CARBON BUDGET (2020) RECOMMEND THAT PEATLANDS ARE WIDELY RESTORED TO THEIR NATURAL STATE AND MANAGED SUSTAINABLY.

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

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 3. Rewetting through damming man-made drains and 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 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.4



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

- 1. Peatland assessment
- 2. Ecological surveys
- 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

When peatlands have been modified, gaps appear in the protective layer of surface vegetation, and the bare peat then degrades and erodes, creating drainage channels which further speed up the loss of water from the soil. These can be seen on the left. Work started 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.

1 IUCN National Committee United Kingdom (2021) About Peatlands see https://www.iucn-uk-peatlandprogramme.org/about-peatlands 2 UK Government (2021) England Peat Action Plan

THE EDEN PROJECT

WE'RE SUPPORTING THE EDEN PROJECT BY FUNDING THE PLANTING OF 1,000,000 TREES THROUGH OUR PROMOTIONS:

Eden Reforestation Projects is a nonprofit organization based in California, USA that works in developing countries to reduce extreme poverty and restore healthy forests. a milestone of planting The organization employs thousands of local villagers 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 333 million trees in June 2020, with an aim to plant and provides them with the a minimum of 500 million trees each year by 2025.



PROMOTIONS INCLUDE: LOST LAGER GIVEAWAY (1 tree per 4 pack) ALD IPA (1 tree per case) UNITED PLANET (1 tree per 4 pack) **BUY ONE GET ONE TREE** (for every headliner redeemed)



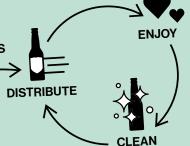
FROM SEPTEMBER 2021 LOOP HAS BEEN TRIALLED IN 10 MAJOR TESCO STORES ACROSS THE UK, WITH BREWDOG AS AN OFFICIAL PARTNER.

Loop is a global platform for reuse where any manufacturer can create reusable products and any retailer can make reuse easy, convenient and affordable allowing consumers to buy anywhere and return anywhere. LOOP is helping us reduce our downstream waste by reusing our glass.

PURCHASE - DRINK - RETURN. SIMPLE. EFFECTIVE.









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.











POWERED & TER BEER.