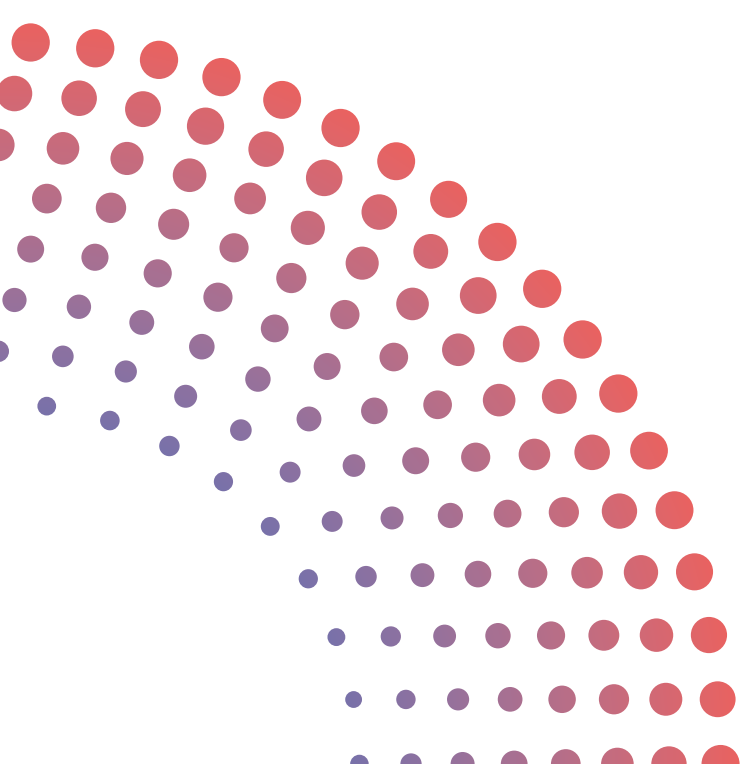


**ZERO  
CARBON  
FORUM**

# **TOOL KIT**

## **BREWERIES**

Your guide to taking climate action now



**MEASURE** ► **PLAN** ► **PEOPLE** ► **ACT**



 **Brewers' Company**

# TOO LITTLE, ALMOST TOO LATE

Two years into  
the Decisive Decade,  
we are in the middle  
of a climate  
disaster.

Despite efforts, climate change is causing dangerous and widespread disruption in nature — affecting the lives of billions around the world. Temperatures have increased by 1.1°C, tipping points are being breached with some impacts now considered irreversible.

To limit the worst impacts, we're all in a race against time to prevent warming beyond 1.5°C. We need deep reductions in emissions across all economic sectors within 10 years.

"The scientific evidence is unequivocal: climate change is a threat to human wellbeing and the health of the planet. Any further delay in concerted global action will miss a brief and rapidly closing window to secure a liveable future." The window for action is closing...

Source: **Ref IPCC (2022)** >

## HOSPITALITY STEPS UP TO THE PLATE

A typical brewery emits over 832 tonnes of carbon per £m of turnover each year, the equivalent of heating 259 households in the UK.

Around 35% of UK emissions come from production and consumption of food and drink. That means our sector has a role and duty to solve the problem - because we're a big part of it.

Carbon is the new currency! And there are huge opportunities to cut carbon across ALL your operations. By taking ownership with leadership, sharing successes, innovation, technology and creativity — we will be able to reach our sector targets of net zero by 2030 for our own emissions and across our supply chain by 2040.

We have developed this toolkit in partnership with the BBPA, supported by The Worshipful Company of Brewers *via a grant from the Brewers' Research & Education Fund*, to show practical ways you can reduce your carbon emissions, saving money to enable your business to thrive along the way.

In Hospitality, action speaks louder than words. The time for talking is over. Align your business on a pathway to survive and thrive.

Helping hospitality  
HIT NET ZERO Carbon.

<sup>1</sup>WRAP (2021). Pathway 2030: Delivering a 50% reduction in the GHG footprint of UK food and drink. Accessed at [Wrap.org.uk](https://www.wrap.org.uk)



# PATHWAY TO ZERO

## PLAN - PEOPLE - ACT - MEASURE

### ACT

Take action, follow the initiatives you've set out in your plan and make changes to your operations - cutting both your carbon and our costs.

### MEASURE

Monitoring progress is key! Measure your footprint again. Where have you made carbon savings? Where have you made cost savings? What do you still need to work on?

**REPEAT**



### PEOPLE

Who are the key people to drive carbon and cost reductions within your business? Your management team, head chef or brewer? Empower and support your team to make positive changes towards a sustainable future. Collective action will achieve so much more.

### PLAN

Understand your current footprint, identify your emission hotspots. Establish where you could make the biggest savings carbon and financial are and use the initiatives below and make a plan to start to reduce them.



Raise a glass to celebrate your success with your team and your customers, we're hospitality after all!

# PATHWAY TO ZERO PEOPLE

	Cost	Carbon Impact	No. of ZCF members already doing	
<b>Staff training on energy</b>	£	***	68%	Deliver effective staff training on energy management to reduce your consumption by up to 30%. <i>An average restaurant could save £2,500 to the bottom line in a year.</i> That's a carbon saving of over 6 tonnes per year. <b>Carbon Statement.</b>
<b>Reverse Logistics Recycling Enhancements</b>	£	***	16%	Greene King pubs, hotels and restaurants currently backhaul all recycling through the GXO food service network. These current materials include food, used cooking oil, plastic, metals and card/paper. <i>This increases efficiency in the existing reverse logistics model to improve recylcate quality, quantity and segregation.</i> <b>Greene King - Brewing Green.</b>
<b>Transport options for employees</b>	££	*	55%	How do your employees travel to work? Can you promote car pooling or encourage cycling? Inform employees about the <b>Government's Cycle To Work Scheme.</b> Install a secure lock up, showers and changing facilities. Install EV charging points and promote the use of <b>Hybrid &amp; Electric Vehicles.</b>
<b>Employee engagement</b>	£	**	86%	Awareness of the climate crisis is at record highs, and people expect business to be taking a lead. Companies with strong sustainability programs have higher employee loyalty, morale, and job satisfaction. Appoint a 'Green Guru' within your front and back of house to help drive change. It's good for everyone! <b>Sustainable Business Employee Engagement.</b>
<b>Customer engagement</b>	££	**	21%	Tell your customers about your sustainability journey. They want to know! Effective marketing of your message will build your customer base and secure customer loyalty. 75% of customers, expect businesses not Government to lead the fight on climate change <sup>1</sup> . <b>Deloitte Sustainable Consumer Research.</b>

£ - Low    ££ - Medium    £££ - Strategic Cost    |    \*Low Savings    \*\*Medium Savings    \*\*\*High Carbon Reduction

<sup>1</sup>Source: Edelman Trust Barometer 2022

# PATHWAY TO ZERO PLACE

	Cost	Carbon Impact	No. of ZCF members already doing	
<b>Switch to 100% renewable energy</b>	£	***	68%	Would you like to reduce your on-site emissions by 1/3? Whilst we know its not currently easy to switch, look at the options you have with your current supplier. <b>Contact your current energy supplier to discuss your move to renewable energy today.</b>
<b>Smart metering and submetering</b>	£	***	76%	Installing smart metering and submetering to measure usage, enables an instant response to changes in use. <b>Contact your current energy supplier to arrange your meter change today.</b>
<b>Cellar cooling controls</b>	££	**	52%	Installing timers and automatic shut-off devices for appliances like line coolers and cellar cooling equipment with Cellar Manager. Designed to save 30% in cellar cooling energy by maintaining 12 degrees. A potential 88% return on investment. <b>Greene King - Brewing Green.</b>
<b>Efficient equipment and appliances</b>	£	**	88%	When you update equipment go for the most efficient available. When buying catering equipment check energy consumption and ratings. For lighting solutions (LEDs) are a super quick win, with bulbs that use less energy and last longer. <b>Switch To LED Light Bulbs.</b>
<b>Insulate</b>	£	**	32%	Stop your building leaking energy. Non-domestic buildings are responsible for 9% of UK Greenhouse gas emissions every year. Improve your insulation across your buildings, including the beer cellar. According to CDP data, return on investment can be as low as a year, average payback inside 4 years. (Final UK greenhouse gas emissions national statistics: 1990 to 2018).
<b>Change your refrigerant gases</b>	££	*	24%	Refrigerant gas (F-gas) is a major source of carbon emissions. Switching to lower emitting gases when servicing will reduce your emissions over time. <b>Energysavingtrust.org</b>
<b>Waste – options for re-use</b>	£	***	92%	Are you sorting and recycling your waste? The objective is to reduce and reuse first and then recycle. Adnams has taken the approach to reuse spent grain as animal feed across herds of cows and spare yeast to local pigs. <b>Adnams Sustainability Story.</b>
<b>Install water meters</b>	£	***	18%	Measure your water usage. It helps you to plug those leaks quickly when they happen! <b>Castlewater.co.uk</b>

£ - Low    ££ - Medium    £££ - Strategic Cost    |    \*Low Savings    \*\*Medium Savings    \*\*\*High Carbon Reduction

# PATHWAY TO ZERO **PRODUCT**

	Cost	Carbon Impact	No. of ZCF members already doing	
<b>Source locally where possible</b>	£	**	47%	<p>Since the CO2 shortage of 2018 and again in 2021, St. Austell switched to a more sustainable supply of CO2 for our breweries and significantly reduce the supply delivery mileage thus reducing our scope 3 emissions. <b>St Austell - Brewing Green.</b></p> <p>In 2014, Hogsback Brewery, planted a traditional hop garden across the road from their brewery in Surry, the first in 100 years in the Farnham area. Now their brewery is supplied by their own Farnham White Bine hops, reducing their logistic miles travelled for their own hops whilst also maintaining quality. <b>Our Hop Garden - Hogs Back Brewery.</b></p>
<b>Sustainable sourcing</b>	££	***	23%	<p>Moving to a sustainable sourcing model is a great way to collaborate with your supply chain and future proof your business. Talk to your suppliers to ask if they have set a net zero target and what steps they are taking to improve the sustainability of their products.</p> <p>Muntons aim to reduce scope 1 and 2 GHG emissions by at least 45% based on 2010 levels by 2025 to hit science based target and minimise global warming impact of our operations to &lt;1.5C. <b>Muntons - Brewing Green.</b></p>
<b>Change your packaging</b>	£	*	62%	<p>Adnams, light-weighted their glass bottles by 38%. They have created cardboard-only multipacks that can be sent without outer packaging and new products are only developed in cardboard. We have committed to removing shrink wrap from seasonal and limited releases like our collaboration can cases. This is removing 18 tonnes of plastic from use each year. <b>Adnams Packaging.</b></p>
<b>Reduced transport emissions</b>	£	***	48%	<p>Kegstar, the one-way keg rental business has 'beaten the traffic' in London thanks to its year-long partnership with Pedal-Me. It is a cargo delivery service run entirely on e-bicycles collecting empty 30ltr kegstar kegs. It not only reduces CO2 emissions, but saves on congestion charges, parking issues and emission zone costs. <b>Kegstar / PedalMe - Brewing Green.</b></p>
<b>Re-use waste products</b>	£	**	16%	<p>Toast Ale , a group of 25 UK and Irish breweries, joined forces to produce a limited edition collection of beers, combatting food waste in the process using old bread within their brew. Whilst it is also partnering with Soil Heroes to support UK farmers replenish soil quality, sequestering 360 tonnes of CO2 as well as holding more water and improving biodiversity. <b>Toastale.</b></p>

£ - Low    ££ - Medium    £££ - Strategic Cost    |    \*Low Savings    \*\*Medium Savings    \*\*\*High Carbon Reduction



The **Zero Carbon Forum** is a non-profit organisation, empowering members to reach sustainability targets with more speed, efficiency, and profit as a united effort. With defined roadmaps backed by peers, government, and leading experts — together we're on a path to survive and thrive.

Our **Membership** includes large and small businesses spanning all sectors of hospitality, including restaurant chains, contract caterers, hotels, pubs and brewing.

Our **Roadmap** guides members in greater detail to decarbonise and set net zero strategies. It's tailored to the food and drink industry with actionable insights that businesses can use right now to start their carbon reduction journey.

If you've done most of these and are ready for what's next, contact The Zero Carbon Forum, we can help with membership, bespoke support or both contact [support@zerocarbonforum.com](mailto:support@zerocarbonforum.com)

## ZERO CARBON FORUM

[support@zerocarbonforum.com](mailto:support@zerocarbonforum.com) | 020 7692 4244 | [www.zerocarbonforum.com](http://www.zerocarbonforum.com)



The beer and pub sector is committed to reducing its environmental impact and in playing a direct role in tackling the impact of climate change. This is demonstrated through the Brewing Green commitments and which reflect the ongoing work to support a sustainable beer and pub sector. For more information please visit **Brewing Green**.



The development of this brewing carbon calculator was supported by **The Worshipful Company of Brewers** via a grant from the Brewers' Research & Education Fund.

ZERO is EVERYTHING.