

A CLIMATE-NEUTRAL FOOD BASKET TOO GOOD TO BE TRUE?



March 2023

TABLE OF CONTENTS

Why it matters to consumers	3
Introduction	3
In a nutshell	4
What is carbon offsetting?	5
Carbon neutral claims: doing more harm than good	5
Scientifically inaccurate.....	5
Consumer confusion	6
Exaggerated claims	8
Reality check: Examples from across Europe	9
Single-use products	9
Carbon neutral meat and dairy?	10
No such thing as a carbon neutral banana	14
What should the EU do about it?	15

WHY IT MATTERS TO CONSUMERS

As consumers are becoming ever more aware of the impact of the food system on the planet, environmental claims on food and beverage packages are increasingly commonplace. While consumer information can play a role in helping guide consumers towards more sustainable options, some green claims, such as ‘carbon neutral’ can unfairly confuse and mislead shoppers when purchasing food and drink products in the supermarket. The current legislative framework only allows authorities or courts to intervene once the damage is done and consumers have already been misled. Consumers should in the first place not be exposed to such deceptive practices and that is why BEUC is calling for such claims to be banned in the EU.

INTRODUCTION

As the consequences of the climate crisis become acutely evident, consumers are increasingly concerned about the environmental impact of their purchases with many now willing and wanting to buy more sustainable products.

A BEUC survey carried out in 2019 revealed that over half of European consumers say that sustainability concerns have some (42.6%) or a lot of influence (16.6%) on their food choices. Two thirds are willing to change their eating habits for the environment, yet struggle to turn intention into deeds, partly because of the challenge of identifying the sustainable options in the shop.¹ In turn, businesses have reacted and the number of claims promoting a brand or product’s supposed green credentials on the market has exploded with the food sector being no exception.

However, as green claims have become more commonplace, so too has the practice of ‘greenwashing’ where claims can have more to do with marketing than serious environmental action.

While the transition to a more sustainable food system should not and cannot rely on individual consumer choices alone, food information is a tool which can help signpost shoppers towards more sustainable options, **provided that the information is reliable, meaningful and understandable.**

One type of green claim which has become extremely common on the grocery shelves in recent years are those which relate to the climate impact of foodstuffs, suggesting that products are ‘carbon neutral’, ‘CO₂ neutral’, or ‘climate-neutral’. This practice is scientifically inaccurate and misleading for consumers, and BEUC is therefore calling for such claims to be banned.²

Together with our members, we have gathered some examples of these misleading claims across Europe to highlight their proliferation in the food sector and the problems they pose for consumer confusion.³

¹ BEUC (2020). [One bite at a time: consumers and the transition to sustainable food.](#)

² BEUC (2021). [Proposal on empowering consumers for the green transition.](#) Position paper.

³ Disclaimer: These examples are presented for illustrative purposes only and are not an exhaustive representation of carbon neutral claims on the food market. Furthermore, they were gathered throughout 2021 and some may no longer be in use at time of publication.

IN A NUTSHELL

BEUC is calling on the EU to ban the use of carbon neutral claims for all food and drink products for the following reasons:

1

It is first and foremost **scientifically inaccurate** to describe any food product as ‘carbon neutral’: the production of all food and drinks will always necessitate the emission of carbon (or other greenhouse gases such as methane). Carbon neutrality is a concept which only makes sense on the planetary level.

2

The use of carbon offsetting, which underpins (partially or even the totality of) most such claims, is a controversial practice which provides **no guarantees for ‘locking in’ carbon** for the future. It allows companies to give the impression of taking serious immediate action on their climate impact whilst in reality delaying it for many years by opting to “compensate” it, which is easier and cheaper than cutting emissions from their current activities.

3

These claims are misleading for consumers. Not only do they give the false impression that the products are a good choice for the climate, but many consumers would also be disappointed to discover that such claims do not equate to serious reduction of emission-intensive activities.

4

Even when complaints made to national authorities about these kinds of deceptive claims are successful, **the process is so slow** that the marketing impact of the climate-greenwashing will have already been made.

5

By pushing consumers to opt for seemingly ‘carbon-neutral’ options, climate neutral claims on food can **deter them from making dietary changes** (e.g. eating a more plant-based diet) which could achieve **much more significant climate impact** overall.



WHAT IS CARBON OFFSETTING?

'Carbon neutral', 'CO₂ neutral', 'carbon positive', 'carbon neutral certified'... the list goes on. These claims are now a common sight on supermarket shelves. Less well known however are the measures food companies are using to justify such positive-sounding claims.

Carbon offsetting is the practice which lies behind many food companies' carbon neutrality claims. It allows businesses to pay, often cheaply, for carbon credits from offsetting projects to 'balance' out their own carbon-emitting activities in order to claim 'carbon neutrality'. Each credit represents one ton of carbon emissions compensated.

These carbon compensation schemes often rely on tree-planting projects in developing countries to generate such credits. However, while the effects of carbon emissions from companies buying credits are certain and long-term, the compensatory effects of nature-based offsetting projects are anything but guaranteed.⁴

CARBON NEUTRAL CLAIMS: DOING MORE HARM THAN GOOD

Scientifically inaccurate

Carbon neutral claims and their derivatives can give the misleading impression to consumers that the products on which they appear have no negative impact on the climate. From a scientific perspective however, such a concept is impossible to achieve at product or company level, as carbon neutrality – the balance between carbon emissions from human activity and the removal of the same amounts of greenhouse gases from the atmosphere – only makes sense on the global level.

Carbon offsetting considers equivalent amounts of carbon emitted to those which are sequestered. This 'burn now, pay later'⁵ approach fails to address the lifespan of emitted carbon which can remain for hundreds of years while carbon offsetting schemes, which often rely on forestry projects, have no guarantee of permanence. Logging, as well as droughts and wildfires (increasingly more likely as the effects of climate change become clear) can quickly eradicate fragile forests planted as offsetting projects, whilst the carbon for which they are meant to compensate remains in the atmosphere for centuries. The same is true for offsetting schemes that rely on carbon farming programmes, whereby farmers are being paid to implement certain agricultural practices supposed to draw carbon into their soils: once the programme ends, land can be converted to a parking lot or ploughed up, releasing the carbon that had been sequestered.^{6,7}

There is also a temporality gap between the timing of greenhouse gas emissions and that of their (expected) compensation. Indeed, carbon sequestration takes place over decades of tree growth, and

⁴ Greenfield, Patrick. 'Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows', The Guardian, 19th January 2023.

⁵ Dyke, J., Watson, R. and Knorr, W. (2021) *Climate scientists: concept of net zero is a dangerous trap*, The Conversation.

⁶ GRAIN (February 2022). [From land grab to soil grab – the new business of carbon farming.](#)

⁷ Eurovia (2022). [Carbon farming: a new business... for who?](#)

not on the date of purchase of the offsetting credits. At a time of climate emergency, the nuance is significant.

Another issue linked to carbon offsetting schemes is the risk of land grabbing, with carbon sequestration projects (such as afforestation projects) adversely affecting the livelihood of local communities in third countries where they are being implemented. Also in the EU, peasant farmers organisations have warned that carbon farming risks reinforcing land concentration and purchase by large operators, at the expense of small farmers, for whom access to land might become ever more difficult.⁷

Finally, emission compensation schemes can deter companies from taking more ambitious – yet generally more costly – action to *reduce* in-house emissions. A UK statutory advisory body on climate change recently warned that there was a clear risk *‘that ‘offsetting’ could lead to reduced business direct emissions reduction. The risk that ‘offsetting’ facilitates slower business action on emissions could have a knock-on effect on public mistrust in business and Government Net Zero action, even towards those relying on carbon credits responsibly.*⁸ It is therefore fundamentally unfair to give the false impression to consumers that there can be an equivalence between carbon compensation activities and those carbon-emitting activities.⁹

Consumer confusion

There are several risks posed by carbon neutral claims for consumer understanding.¹⁰

There are significant informational asymmetries between companies using ‘carbon neutral’ claims and consumers who are exposed to them. Even consumers who are more conscious of the climate crisis and the impact of their consumption choices are unlikely to understand the complex environmental performance data underpinning carbon neutrality claims.

Carbon neutral claims have the potential to give the erroneous impression to consumers that the consumption of such foods may have no climate impact when that is scientifically impossible. Research conducted by the German consumer organisation vzbv found that ‘CO₂ neutral’ and ‘climate neutral’ claims are particularly powerful claims, and those with the strongest positive impact on consumer perception of the (supposed) climate friendliness of a food product – more than providing the product’s detailed CO₂ footprint.¹¹

The survey found that using green claims on carbon-intensive food products can even obscure consumers’ previously held correct judgements on such products’ climate impact. For example, without any climate labels, 70% of consumers were able to correctly classify three food products (a vegan burger patty, a pork schnitzel and a beef rump steak) according to their greenhouse gas emissions (the beef the most carbon-intensive and the vegan patty the least). However, as soon as a ‘climate neutral’ claim is placed on the products, consumer confusion ensues with the percentage of consumers correctly rating the products dropping by over half to just 31%, with over a quarter even believing that the beef steak is the most climate-friendly food.

At the same time, the survey showed that while a strong majority of consumers (69%) personally felt that they understood the ‘climate neutral’ claim, only 8% of consumers objectively understood that the

⁸ Voluntary Carbon Markets and Offsetting, October 2022.

⁹ Kaupa, Clemens, Peddling False Solutions to Worried Consumers the Promotion of Greenhouse Gas ‘Offsetting’ as a Misleading Commercial Practice (July 8, 2022). Journal of European Consumer and Market Law, 2022, Available at SSRN: <https://ssrn.com/abstract=4157810> or <http://dx.doi.org/10.2139/ssrn.4157810>

¹⁰ [CO₂ offset claims, The Netherlands Authority for Consumers and Markets \(ACM\) Consumer Survey](#), July 2022

¹¹ https://www.vzbv.de/sites/default/files/2023-02/23-02_24_Gruene-Marketingclaims-auf-Lebensmitteln.pdf

claim did not mean ‘no greenhouse gas emissions’ had been created.

Promoting the idea that climate change can be tackled without serious and direct reductions of carbon emissions is not only misleading for consumers, but it is also irresponsible in the context of the climate crisis and the corresponding need to undertake urgent and systemic changes to our food consumption patterns. As underlined in the most recent IPCC report, all modelled pathways to limit global warming to 1.5°C (or even 2°C) “involve rapid and deep and in most cases immediate GHG emission reductions in all sectors”.¹²

Carbon neutral claims can potentially encourage consumers to continue unsustainable dietary patterns and purchase products which may in fact have significant climate impacts such as meat and dairy.

It also risks creating confusion and distrust amongst shoppers who can feel deceived when they discover that a food or drink’s ‘carbon neutrality’ is derived from carbon offsets. The sharp increase in consumer complaints and litigation on environmental claims in recent years indicates how many consumers can feel that their trust has been undermined.¹³

A recent qualitative study by the UK Advertising Standards Authority (ASA) on environmental claims found that the use of offsetting to be able to claim carbon neutrality was a primary source of confusion and misunderstanding.¹⁴ Participants felt misled when they found that companies were not directly reducing their carbon emissions but were relying on carbon offsets to use the claim.



¹² IPCC, 2022: Summary for Policymakers. In: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi:10.1017/9781009157926.001

¹³ [Briefing: Legal risks of carbon offsets](#), Client Earth, September 2022.

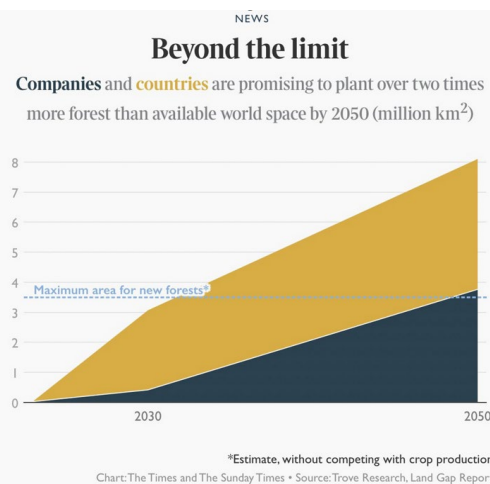
¹⁴ [Environmental Claims in Advertising Qualitative Research Report](#), ASA, July 2022.

Exaggerated claims

And yet, future offsetting is heavily relied upon by companies, including the food industry, to justify their carbon neutral or net-zero claims. It is much rarer for companies to set a specific emission reduction target which is independent from any offsetting practices, even though emissions reductions are much more impactful and meaningful.

A recent report assessing the transparency and integrity of some of the world's largest companies' (including food companies) emission reduction and net zero targets found that their green claims were significantly overstated.¹⁵ On average, the net zero targets commit these companies to reducing their emissions by only 40%, not 100% as could be understood by the 'net zero' term.

Recent analysis of existing climate commitments of 6,500 companies showed that these pledges, combined with those already made by countries, would require more than double the land available to grow the trees and forests for carbon credits. In other words, demand is already significantly outstripping supply while new pledges continue to be made, further undermining the potential contribution such projects could make to emissions reductions.¹⁶



In a sea of green claims, genuinely impactful ones can be drowned out. Both stakeholders who have committed to seriously reducing their emissions and others who rely on buying up cheap carbon credits to cover business-as-usual are using similar claims.

It is impossible for consumers to verify whether the amount of emissions that a company has declared and for which it has compensated actually corresponds to the amount of emissions generated in production. Nor is it possible for consumers to determine whether the projects that have been financed through compensation actually prevent greenhouse gases as effectively as they promise. Both points are not subject to any public or official control, but are solely the responsibility of the manufacturer and supplier of a product or service as well as the provider of the label.

¹⁵ [Corporate Climate Responsibility Monitor - Carbon Market Watch](#)

¹⁶ Kendix, Max. 'The root of the problem with climate pledges to plant trees: there's not enough space', The Times, 9th January 2023.

REALITY CHECK: EXAMPLES FROM ACROSS EUROPE

Despite the reputational risks and increasing legal pitfalls for companies who choose to use carbon neutral claims, their regular presence on supermarket shelves points to the beneficial marketing effects such claims can have. While all claims for carbon neutrality are misleading in themselves, the claims are often used on food and beverage products which entail significant climate impact: from processed pork products to bananas transported half-way across the world, the examples below, gathered by BEUC and our members, highlight how meaningless such claims can be.

Single-use products

Even food products using single-use packaging have laid claim to 'carbon neutrality'. Many of our members (e.g. Fédération romande des consommateurs in Switzerland, UFC Que-choisir in France, Test-Achats in Belgium and Forbrugerrådet Tænk in Denmark) found drinks packaged in plastic bottles making such claims.



The French consumer organisation CLCV is currently taking Volvic (a mineral water brand marketed by the Danone group) to court for the use of the misleading 'carbon neutral' claim on its bottles of water.¹⁷ They are also taking Nespresso to court for misleading green messages including claims that its single-use coffee capsules are 100% carbon neutral. The company has limited plans to reduce the carbon emissions of its current activities with just 5% of its 'carbon neutrality' coming from such actions and the rest (95%) coming from carbon compensation schemes.¹⁸

Carbon neutral meat and dairy?

Methane is a greenhouse gas as is carbon dioxide (CO₂). But methane is 84 times more potent than CO₂ on a 20-year timescale. Slashing methane emissions is therefore highly relevant to reaching our climate objectives – and the EU has committed to cutting methane emissions by 30% by 2030 under the Global Methane Pledge.

Over half of total methane emissions in the EU come from the agriculture sector – 94% of which are linked to the enteric fermentation (digestion process in ruminants) and management of livestock manure. Enteric fermentation from cattle alone accounted for 69% of CH₄ emissions in the agriculture sector in 2020.¹⁹

Green marketing messages on some of the most climate-damaging food categories such as industrial intensively produced meat and dairy, have the potential to lead consumers astray.

Milk

Following criticism from the Danish consumer organisation, Forbrugerrådet Tænk and others in Denmark, Sweden and the Netherlands, Arla Foods, one of the world's largest dairy companies, suspended a marketing campaign targeting these three markets which claimed that its milk was 'carbon-neutral' due to the purchasing of forest-based carbon credits.²⁰ In fact, the 90 million litres of milk the company sold with this label actually emitted a considerable 123,000 tonnes of carbon into the atmosphere.

While the decision is still awaited in Denmark, in February 2023 the Swedish Patent and Market Court found that these claims gave consumers a misleading impression that the product does not give rise to any climate footprint at all. In its ruling, the Court highlighted that, while environmental claims have significant commercial value, consumers have difficulties in critically evaluating their plausibility. The Court also underlined that the lack of permanence of carbon offsetting projects is problematic. The Court has henceforth banned the use of the claim and warned that future use of the claim will incur a fine of SEK 1 million.²¹

Although the company ultimately decided to withdraw these debated claims, Forbrugerrådet Tænk highlighted that in Denmark, the slow processing of complaints to the Consumer Ombudsman means that greenwashing claims can be seen by and mislead many thousands of consumers while a verdict is awaited.

¹⁷ [Dossier greenwashing](#), CLCV, July 2022.

¹⁸ [CCFD – Terres solidaires](#) (2021).

¹⁹ <https://www.eea.europa.eu/publications/methane-emissions-in-the-eu>

²⁰ [Arla Sustainability Report 2021](#), Arla Foods (2021).

²¹ <https://www.konsumentverket.se/aktuellt/nyheter-och-pressmeddelanden/pressmeddelanden/2023/domstolen-forbjuder-arlans-netto-noll-reklam/>

In the Netherlands, the Advertising Standards Committee partially upheld its decision that Arla's labelling of the claim on their products was in contravention of the Dutch Code for Environmental advertising.²²

'Carbon neutral' labelled dairy products were also found by our members: vzbv in Germany, Test-Achats in Belgium and Consumentenbond in the Netherlands. Our Spanish member, OCU, found an example of a milk bearing a 'carbon neutral' claim which, on closer inspection, only referred to the packaging of the product and not the actual milk itself.



In the Netherlands, the Advertising Code Committee has ruled that the retailer Albert Heijn was misleading consumers with the claim that one of its private label milk would become 'climate neutral' from a certain date. Indeed, according to researchers from Wageningen University, whether grass pastures can compensate for greenhouse gas emissions from the cows is impossible to determine in advance, as the sequestration of CO₂ in the soil depends on multiple variable factors such as the nature of the soil, weather conditions, etc.²³ Some other experts have gone even further in challenging the ability of pastures to ever compensate the emissions generated by grazing livestock, regardless of how well-managed these grazing systems are.²⁴

²² The Appeals Board overturned the original ruling's finding that the marketing was in breach of Article 3 of the Code for Environmental Advertising but upheld its decision that it was in breach of Article 2 which addresses misleading consumers on environmental aspects of products. <https://www.reclamecode.nl/uitspraken/resultaten/voeding-en-drank-2021-00472-cvb/335095/>

²³ <https://www.melkvee.nl/artikel/410991-reclame-code-commissie-fluit-albert-heijn-terug/>

²⁴ Garnett, T., Godde, C., Muller, A., Rööös, E., Smith, P., de Boer, I. J. M., zu Ermgassen, E., Herrero, M., van Middelaar, C. E., Schader, C., & van Zanten, H. H. E. (2017). *Grazed and confused? Ruminating on cattle, grazing systems, methane, nitrous oxide, the soil carbon sequestration question - and what it all means for greenhouse gas emissions*. FCNR. <https://edepot.wur.nl/427016>

Cheese

In Belgium, the Milcobel dairy cooperative has launched a 'CO₂ neutral' cheese. But while part of the greenhouse emissions for producing the cheese have indeed been cut – and Milcobel has committed to reducing them further by 2035 –, the remaining emissions are being compensated via offsetting projects in Belgium and abroad, without it being clear from the logo on the packaging.²⁵



Meat

Our Austrian member Arbeiterkammer found a retailer advertising (on street billboards) a range of supposedly 'CO₂ neutral' processed pork products. On the retailer's website, it becomes clear that in addition to reducing some of their CO₂ emissions, 'climate protection projects' (carbon offsetting) such as re-forestation activities in Colombia for example, play a major role in their claim to compensate for their carbon emissions.²⁶



The Danish consumer organisation, Forbrugerrådet Tænk, has joined the Danish Vegetarian Association, Dansk Vegetarisk Forening, in a lawsuit against the big meat company Danish Crown over its 'climate-controlled pig' campaign, which the two organisations (and some other green groups) find is misleading consumers.

The campaign called into question Danish Crown's claims that 'Danish pork is more climate-friendly than you think', and that it has reduced the climate footprint of its pork meat by 25% since 2005. As a result, supermarkets have stopped selling the pork products bearing the 'climate controlled' claim on their packaging.²⁷



Meanwhile, there is a scientific consensus that, in Europe, the average consumption of red and processed meat products exceeds recommendations, both for health and environmental reasons. The EU's Beating Cancer Plan recommends shifting to a more 'plant-based diet with less red and processed meat [...] and more fruit and vegetables'. Green claims placed on food products for which intakes should be reduced blurs the messages to consumers, which is especially problematic given that we know that consumers are struggling to cut down on their meat consumption.²⁸

²⁵ <https://co2.bruggefromage.be/plus-de-saveurs-sans-co2>

²⁶ <https://www.hofer.at/de/ueber-hofer/presse/presseaussendungen-heute-fuer-morgen/2021/klimaschutzkampagne.html>

²⁷ <https://borsen.dk/nyheder/baeredygtig/forbrugerradet-taenk-gaar-ind-i-historisk-retsopgor>

²⁸ BEUC (2020). [One bite at a time: consumers and the transition to sustainable food.](#)

What about plant-based alternatives?

Plant-based alternatives to meat and dairy have a *lower* climate impact than their animal-based counterparts, but their production is not climate neutral either. Our Portuguese member, DECO, found examples of soy and nut milks as well as a retailer's vegan ranges of food and drink products proclaiming their carbon neutrality. While the carbon neutral claim made on products from Lidl's 'Next Level' vegan range indicates it is based on compensation ("100%- CO₂ Compensation!"), this is not the case for products from Nestlé's Wunda brand, which just claim 'neutra en carbono' (although the carbon neutrality is partly achieved through carbon offsetting projects).



The apparent effectiveness of carbon credit schemes are, in theory, assured by private certification organisations who are key players in the voluntary carbon markets. They decide how many credits should be assigned to different offsetting projects and are meant to ensure that such credits do prevent carbon emissions. However, these bodies have been criticised for significantly overestimating the impact of the carbon offsetting projects they evaluate and independent analysis has raised serious concerns on the reliability of their guarantees.

A recent investigation by UK and German journalists into the world's largest carbon certification organisation (alone responsible for certifying three quarters of the world's carbon credits), revealed that over 90% of the credits certified were of virtually no environmental benefit.²⁹



²⁹ Greenfield, Patrick. 'Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows', The Guardian, 19th January 2023.

No such thing as a carbon neutral banana

Even bananas, grown in Costa Rica but transported thousands of miles to be sold on the European market, are claiming carbon neutrality thanks to their participation in offsetting mechanisms. Sitting next to them in the fruit aisle, consumers can also find 'CO2 neutral' blueberries, which according to the company's website can be sourced from as far away as South America. Some clementines were found to make the same claim.³⁰



³⁰ <https://www.beclimate.com/fr/myrtilles/>

WHAT SHOULD THE EU DO ABOUT IT?

In March 2022 the European Commission published a proposal for empowering consumers for the green transition, which aims at clamping down on greenwashing practices (e.g. deceptive environmental claims) that mislead consumers away from sustainable consumption choices. This proposal includes targeted amendments to two consumer law directives: the Consumer Rights Directive and the Unfair Commercial Practices Directive (UCPD).

While BEUC has welcomed this new initiative to tackle the proliferation of misleading green claims (for example by banning generic environmental claims), there are certain areas where the EU can and should go further.

In particular, BEUC is calling for carbon neutral claims to be banned. In the current text of the Commission's proposal, such claims fall under the scope of the new provisions on generic claims, which can open the door for them to continue being used under certain conditions for example, by being supplemented with explanatory statements on the package. The German consumer organisation vzbv found however that the corrective effect of such substantiations were limited. In other words, products which had a general environmental claim such as 'carbon-neutral' substantiated with an explanatory text in the same field of vision maintained the positive image in the eyes of the consumer³¹. That is why **BEUC recommends that carbon neutral claims (and their derivatives³²), including those made on food products, should be explicitly banned** in the annex of the UCPD as they do not stand up to scientific scrutiny.

³¹ https://www.vzbv.de/sites/default/files/2023-02/23-02_24_Gruene-Marketingclaims-auf-Lebensmitteln.pdf

³² Other examples used include: CO2 neutral, climate neutral, 100% carbon neutral, carbon neutral certified etc.



Published in March 2023 by BEUC



The European Consumer Organisation
Bureau Européen des Unions de Consommateurs
Europäischer Verbraucherverband

Rue d'Arlon 80,
B-1040 Bruxelles
Tel: +32 (0)2 743 15 90
www.beuc.eu

Contact: food@beuc.eu



Co-funded by the European Union