Feeding Us Greenwash

An analysis of misleading claims in the food sector

Changing Markets Foundation

www.changingmarkets.org

The analysis in this report was done by the Changing Markets Foundation. The report got input from Carbon Market Watch, Compassion in World Farming, Eating Better, Foodwatch Germany and Greenpeace Denmark.

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Contents

Executive summary and key findings

Numerous studies have shown that greenwashing is rampant across sectors[1] and that it has become a major business risk, especially for investors.[2] Public authorities around the world are preparing for an unprecedented clamp down on greenwashing, with several key regulations coming up in the EU, UK and US, alongside commitments to increase enforcement and impose stricter penalties.

This comes in the context of growing consumer concern about the environment, which translates into actual purchasing decisions and a growing market for ethical products.[3] Recent YouGov polling across the UK and Germany, commissioned by the Changing Markets Foundation, showed that almost half (49%) of people surveyed regularly (always, most of the time, often) choose food products with environmental sustainability labels or certifications. These consumers are interested in sustainable purchasing options, and one in three (35%) are willing to pay more for climate and animal welfare labels. Respondents were asked to indicate their level of concern on a scale from 0 to 10, with 0 being "Not concerned at all" and 10 being "Very concerned". 59% gave a concern score of at least 6 for corporate greenwashing, and this is in line with the particularly low levels of trust in sustainability claims about meat and dairy products (on average around 15% across different sources). So how good are these labels and green claims in reality?

Over the past year, Changing Markets conducted market research to assess how reliable green claims on food products are, with a particular emphasis on meat and dairy, as the climate impacts of these products dwarfs those of any other food.[4] This resulted in the addition of over 50 examples of products, projects and advertisements to our greenwash.com website, where we track corporate greenwashing. In this briefing, we summarise the key trends identified through this analysis and present the findings of the YouGov polling that we commissioned in the UK and Germany. The polling was designed to explore whether the most common green claims in the food sector are impacting consumer choices.

Key findings:

- Greenwashing in the food sector is rampant: our investigation discovered an array of claims that are being placed on even the most carbon-intensive food products, such as beef. Particularly prevalent were climate claims such as 'carbon neutral', 'climate positive' and 'net zero', as well as specific claims about low methane. We also discovered more subtle level of greenwashing,

such as images of grazing cows or small family farms with happy animals.

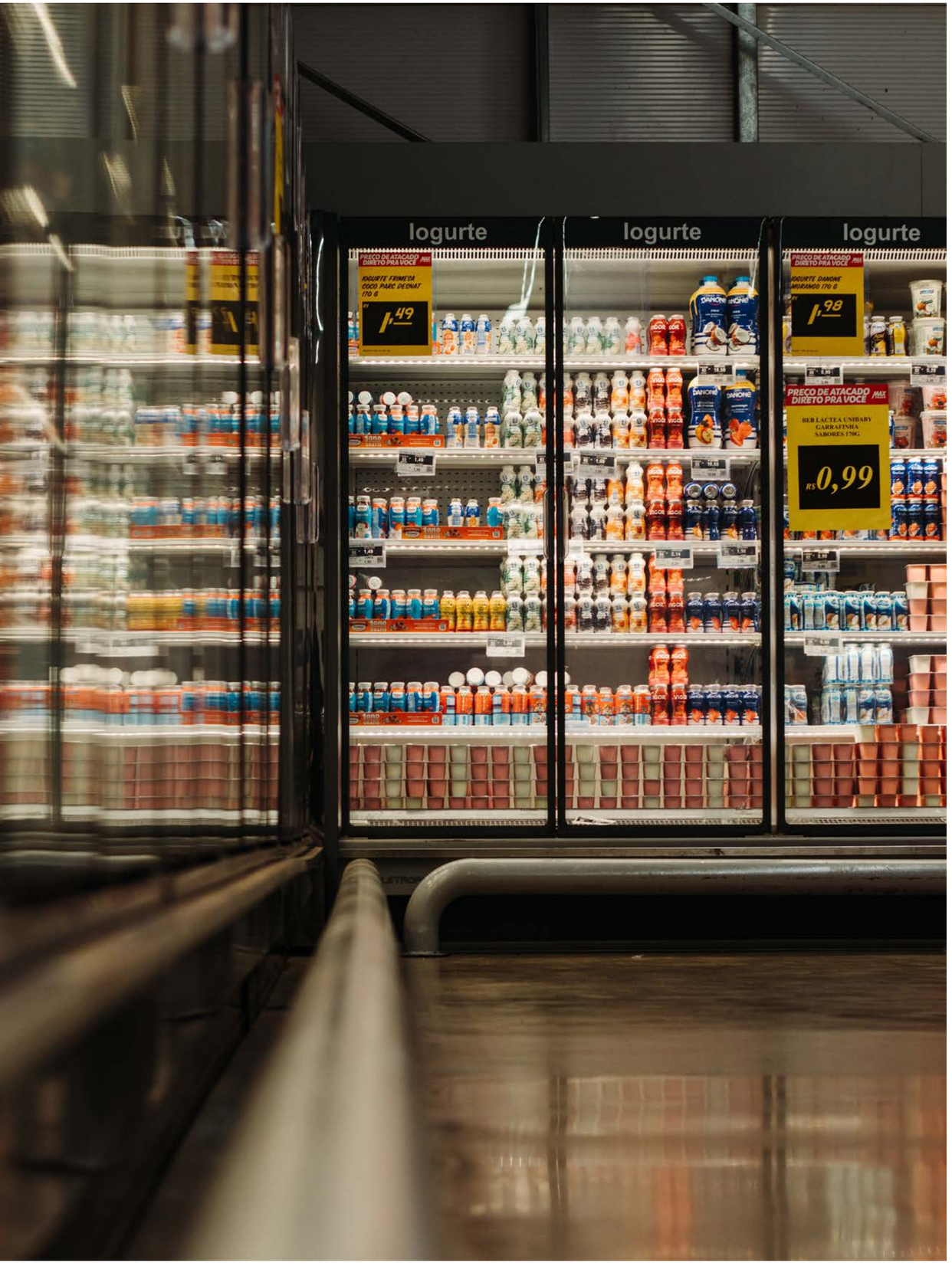
- Meat and dairy companies responsible for outsized greenhouse gas emissions (JBS, Marfrig, Nestlé, Danish Crown, Arla, Danone, Saputo and Fonterra) are making misleading green claims on their products or in their other marketing materials. JBS, the biggest meat producer and one of the biggest climate and methane polluters, has recently been reprimanded for its net zero claim which lacked a credible emissions reduction plan.[5] Nestlé has been making questionable carbon neutral claims on its well-known brands Nespresso and KitKat, while Danish Crown is currently facing a lawsuit for labelling its pork products as 'climate controlled'. Saputo and Arla, our analysis found, regularly utilise a more subtle greenwashing with representations of grazing cows for their dairy products.

- Amazon was found to be one of the worst offenders, as its 'Climate Pledge Friendly' range included several meat and dairy products. This included beef jerky, which scientific assessments have shown to be the most carbon-intensive food product, but which was included in the climate-friendly category because some air had been removed from its packaging.[6]

- Significant greenwashing was discovered on dairy products, including 'carbon neutral' claims that referred only to packaging, ignoring the emissions-intensive contents. We also discovered many dairy products with vague claims, such as 'planet-friendly' and 'sustainable future', along with images suggesting that cows are permanently grazing in the fields - claims which in most cases were not proven.

- People are influenced by the most common claims found through our research. In the UK, 42% of consumers were more likely to buy a product with a 'carbon neutral' label and 29% were willing to pay slightly or much more for those products. In Germany the picture is much the same, with 35% of consumers more likely to buy a meat or dairy product labelled 'carbon neutral' and 36% more likely to buy meat or dairy labelled 'climate positive', with 32% and 36% willing to pay more for these labels, respectively.

This confirms that there is a clear opportunity for businesses to capitalise on people's environmental concerns through greenwashing, without taking genuine positive action for the environment. Therefore, it is urgent that regulators start taking a closer look at food products and companies, regulate green claims, and ensure rules are properly enforced across different markets. At the same time, it is clear that the climate emergency is already affecting food production everywhere. Scientists predict that more than a third of existing areas for crop and livestock production will become unsuitable by the end of the century if there is 'unhalted growth' of greenhouse gas emissions (SSP5-8.5 in IPCC scenarios).[7] Tackling greenwashing alone will not solve this, as such governments must also enact climate legislation and fiscal policies to drive the necessary transformation of the food system, including an urgent reduction in the overconsumption of meat and dairy products.



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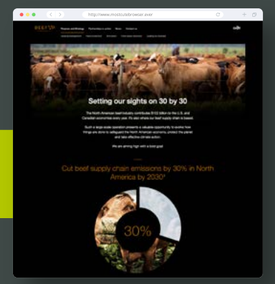
1. Introduction

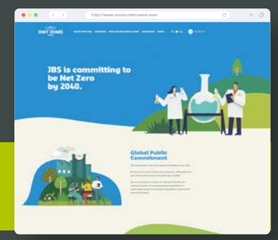
With escalating climate and environmental crises, concerns about environmental impacts are increasingly affecting consumption choices, including what we put on our plates. For some people, this translates into reduced consumption of foods with a comparatively higher climate impact such as meat and dairy. For others, it's about looking for signs that a product is environmentally friendly, which may be based on a company's own claims or a third-party ethical label or certification, which have proliferated over recent years. While factors such as taste and cost remain the key drivers of food choices, sustainability has also been high on the agenda, according to a recent poll by YouGov on behalf of the Changing Markets Foundation. The climate crisis is a concern for a majority of consumers, with 65% of those surveyed in Germany and 71% of those in the UK stating they were concerned about climate change.

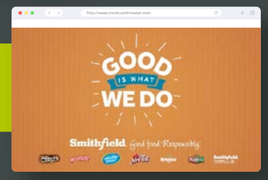
Food companies seem to be responding with solutions - or so it would appear from the growing number of 'carbon neutral' products and nature-inspired branding filling the food aisles. Consumers are motivated by such claims. Our polling shows that almost half (49%) of

Big meat and dairy climate pledges and greenwashing

COMPANY *in alphabetical order*	ESTIMATED EMISSIONS FROM MEAT AND DAIRY OPERATIONS/TOTAL EMISSION*	NET-ZERO PLEDGE**	YEAR	GREENWASHING CASES
Arla	**18.9**M[a]	YES	2050	Carbon neutral milk, vague claims like ‘building a sustainable future’
Cargill	**86.3**M[b]	N/A	N/A	Beef Up Sustainability strategy
DFA Dairy Farmers of America	**45.9**M[c]	YES	2050	Nerd Herd campaign
Danish Crown	**14.4**M[d]	YES	2050	Climate-controlled pork
DANONE	**11.2**M[e]**/25**M[f]	YES	2050	Actimel - Carbon neutral
Fonterra	**30.9**M[g]	YES	2050	Simply Milk New Zealand’s First Carbon Zero Milk
FrieslandCampina	**16.3**M[h]	YES	no later than 2050	On Way to Planet Proof Certification, Essential Start Carbon Neutral infant formula
JBS	**287.9**M[i]	YES	2040	Net-zero pledge
Marfrig	**102.5**M[j]	N/A	N/A	Viva brand - Carbon neutral beef
Nestlé	**18.8**M[k]**/116.5**M[l]	YES	2050	KitKat - Carbon neutral by 2025 Nespresso – Carbon Neutral by 2022
Saputo	**18.1**M[m]	N/A	2050	Cathedral City ‘Make it Better Cheddar’
Tyson	**83.8**M[n]	YES	2050	Farm projects to meet their net-zero target
Yili	**22.2**M[o]	YES	2050	Carbon neutral yogurt
萬洲國際 WH GROUP	**23.9**M[p]	N/A	2050	Good Is What We Do pledge







** Referenced at the end of report.*

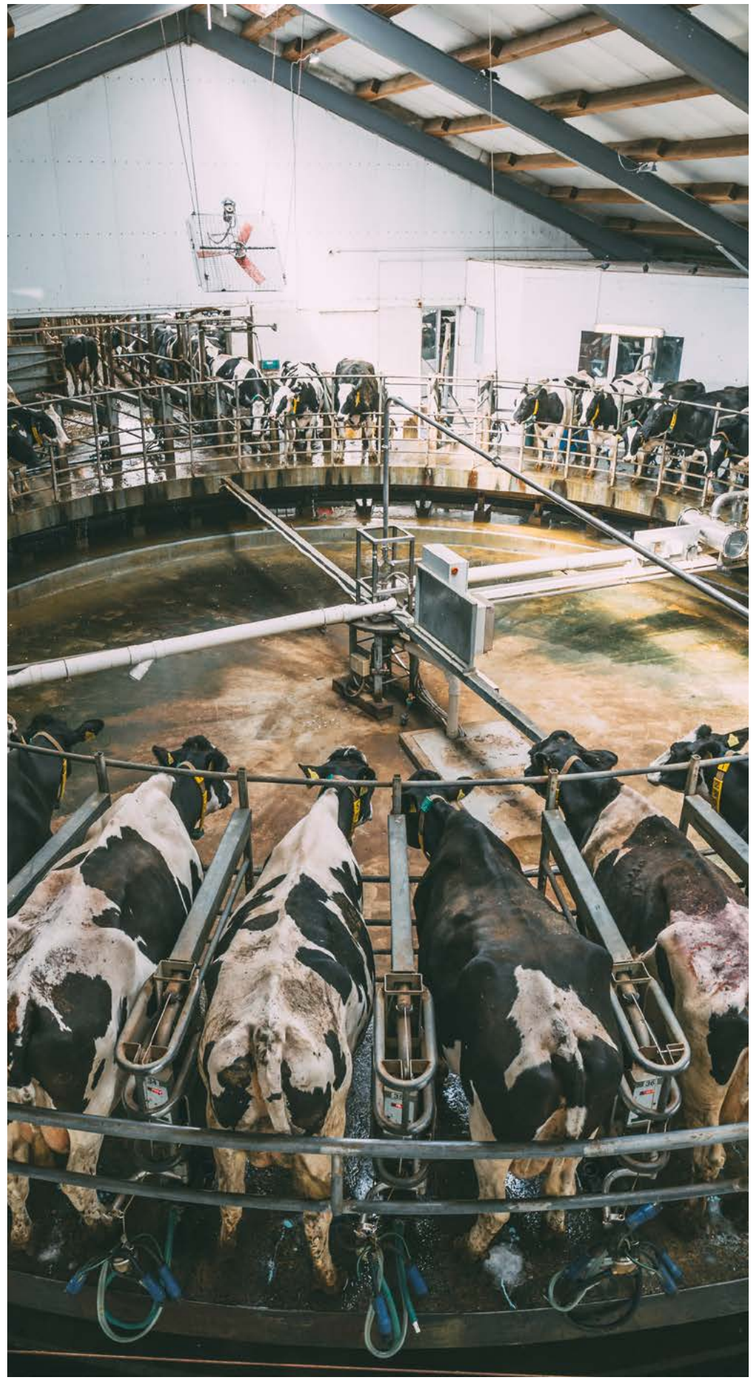
*** Companies have set these targets, though they are not always substantiated or robust.*

people in Germany and the UK regularly (always, most of the time or often) choose products with environmental sustainability labels or certifications. Nearly one in three people (29%) are willing to pay more for climate labels (carbon neutral, climate positive and low methane) and half (51%) are willing to pay more for animal welfare labels.

Within the UK, the annual *Ethical Consumer Markets Report* shows that interest in climate-conscious food purchases are translating into real market shifts.[8] Sales in the 'vegetarian and plant-based alternatives' category increased by 34% between 2019 and 2020, and are now worth £1.5 billion. The 'ethical food and drink' category increased by 143% between 2010 and 2020.

1.1 The climate and environmental impact of the global agro-industrial food system

A recent study by the United Nations Environment Programme reported that 'the food system is currently responsible for about a third of total GHG [greenhouse gas] emissions'.[9] In 2021, Chatham House found that the 'global food system is the primary driver of biodiversity loss'.[10] Globally, production of farmed animals is increasing rapidly, with the majority of animals being reared through intensive farming methods[11] that prioritise profits over animal welfare and the environment.



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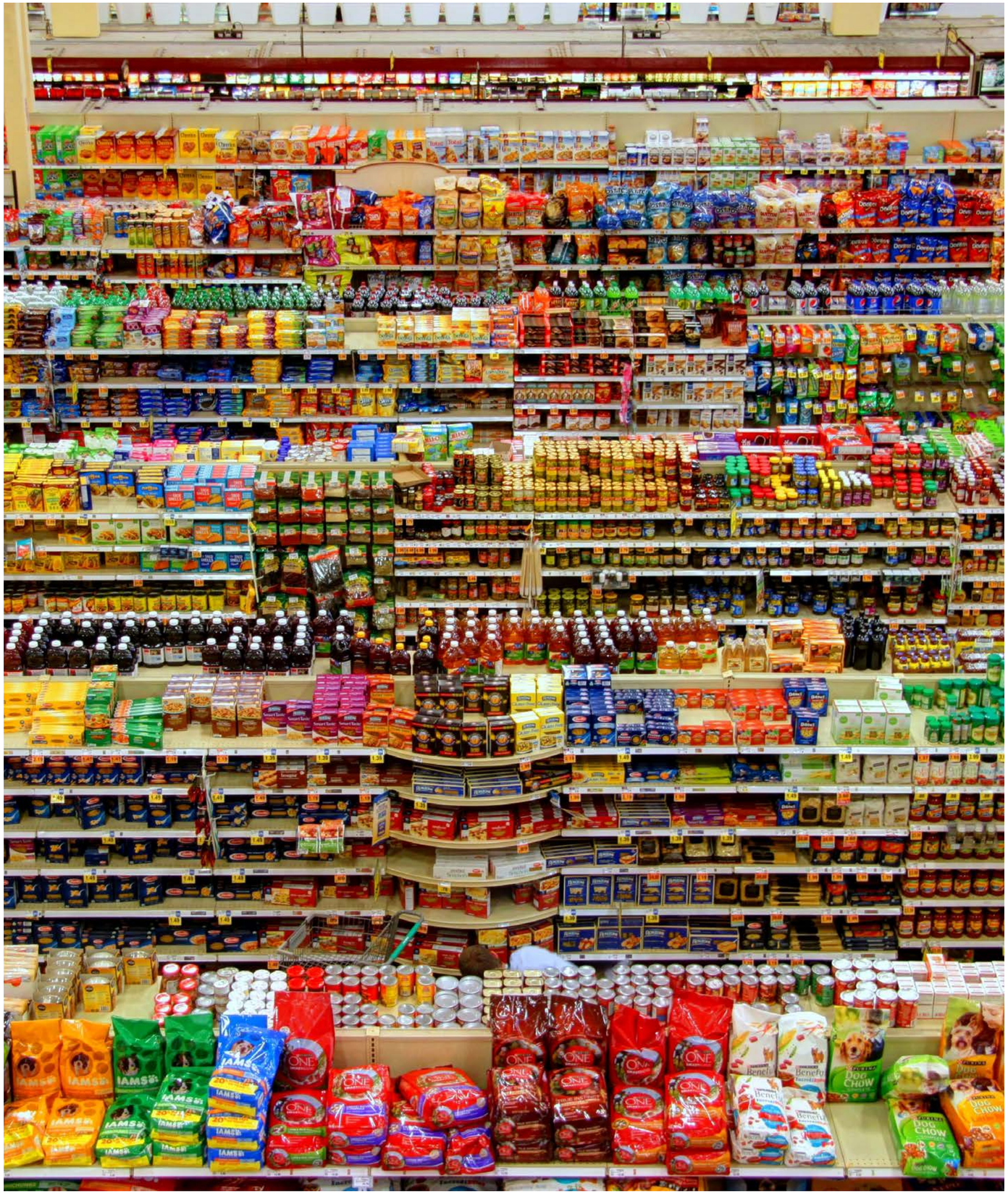
Numerous scientific studies warn that we must embark on an urgent reform of our food system, especially reducing reliance on animal products, which have the highest environmental footprint. Even if the world immediately stopped using all fossil fuels, scientists say that current emissions from the global food system would make it impossible to limit warming to 1.5°C and difficult even to realise the 2°C target.[12]

Recent studies estimate that animal agriculture contributes around 20% of global greenhouse gas emissions.[13] Animal agriculture is also responsible for roughly 32% of the world's methane emissions, making it the single largest source of human-made methane emissions.[14] This greenhouse gas is around 80 times more powerful than CO_2 over a 20-year timeframe[15] and is responsible for around a quarter of global warming since pre-industrial levels.[16] A recent report by Changing Markets and the Institute for Agriculture and Trade Policy showed that methane emissions from just 15 of the biggest meat and dairy companies were roughly 12.8 million tonnes, equal to over 80% of the EU's entire methane footprint.[17] Climate scientists have called for rapid cuts in methane this decade, which adds to the urgency on why we must rapidly reform our food system.



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2. Greenwashing and food

Greenwashing is the practice of falsifying or overstating the green credentials of a product, service or brand. As concerns over the climate emergency, biodiversity loss and pollution grow, so has the number of false or misleading green claims. Greenwashing can trick consumers, investors and policymakers into believing change is happening, when in reality it is not. Greenwashing is also considered an unfair trading practice, as the businesses that are genuinely trying to become more sustainable will be disadvantaged by the ones that are greenwashing.

Regulators are beginning to crack down on greenwashing, with a greater focus on misleading green claims in both the EU and UK. In the UK, the Competition and Markets Authority (CMA) launched its Green Claims Code in September 2021 with the intention to clarify how businesses can be honest with their customers ‘about their green

credentials'. It also carried out a coordinated 'global sweep' of green claims online, finding that 40% could be misleading.[18] In January 2023, the CMA announced plans to scrutinise the green claims of household essentials including food products. And in spring 2023 the Digital Markets, Competition and Consumer Bill will provide the CMA with powers to oversee digital markets and to impose penalties of up to tens of millions pounds for unsubstantiated and misleading claims.[19]

In the EU, the European Commission published a proposal for a 'Directive for empowering consumers for the green transition' on 30 March 2022.[20] The legislation aims to create a set of rules covering aspects such as eco-labels, green claims, premature obsolescence, and contractual information to be provided to consumers. With regards to green claims specifically, the proposal for example bans generic claims unless they're backed by robust methodology such as the EU Ecolabel.

The European Commission is also expected to table a Green Claims Directive in March 2023. This would give member states power to impose criteria and methodologies for companies' green claims and an enforcement system, which would include independent verification. Countries would also be required to impose penalties on companies making unsubstantiated environmental claims.[21]

At the global level, the UN published a report entitled Integrity matters: Net zero commitments by businesses, financial institutions, cities and regions during the COP27 climate conference in Egypt, accompanied by quotes from UN Secretary-General António Guterres highlighting 'zero tolerance for greenwashing'.[22] This sets a tone globally that empty or misleading corporate green claims, like those found in the food sector, will no longer be tolerated and that companies need credible climate targets and emissions mitigation action plans.

2.1 Methodology

In 2022, building on Changing Markets' work exposing greenwashing in fashion and plastics, we conducted an analysis of greenwashing in the food sector. This investigation began with desk-based research finding products using key terms like 'carbon neutral' and 'sustainable', exploring lists of certified products from labelling organisations, and reading articles on 'climate friendly' food products. This was supplemented by visits to supermarkets in the UK and Spain as well as submissions from partner organisations covering the UK, Germany and Italy. In addition to obvious green claims such as 'carbon neutral' or 'sustainable', we looked for imagery and branding that could give a misleading impression of the types of farming methods used. We then checked examples against the CMA's guidance for green claims to determine whether they could be classified as false or misleading.

To complement the product analysis, we commissioned polling by YouGov in the UK and Germany. These two countries were chosen for their comparability in terms of wealth (as measured by GDP) and levels of meat and dairy consumption, while also having a thriving ethical consumer market and, by some measures, high levels of environmental concern, meaning there is a consumer base at which to target green claims.[23] The polling was designed to explore whether the common claims in food greenwashing could impact consumer choices. All figures are based on data from YouGov plc. The total sample size for the UK was 2,067 adults and for Germany it was 2,148 adults. Fieldwork was undertaken in the UK on 7-10 October 2022 and in Germany on 18-20 January 2023. The survey was carried out online. The figures were weighted and are representative of all UK and German adults (aged 18+) respectively. We (Changing Markets) then analysed the country-specific findings to create averages and totals across the UK and Germany.

Credits: Shutterstock

2.2 Common trends in food greenwashing

Greenwashing in the food sector takes a myriad of forms, each masking the reality of an item's genuine impact. Not all green claims are intentionally misleading: some may be genuine, but can still be deemed greenwashing if they are not substantiated. For example, Tesco was rapped for not providing a full life-cycle analysis to back up its claim that its 'Plant Chef' burger was better for the environment than a meat burger.[24] Despite the fact that there is ample evidence that plant-based products overall are better for the climate, the Advertising Standards Authority told Tesco that it needed specific evidence for this product to back up its claim.

Box 2.1: UK and German consumer views on food and the environment

In 2022 and early 2023, Changing Markets commissioned a YouGov poll in the UK and Germany exploring consumer views on meat and dairy, green claims and product labelling.

The poll found that in the UK, 38% say they have reduced their consumption of meat products in the last year and 23% say they have reduced their dairy consumption. Among those surveyed, 71% are concerned about climate change and 33% are likely to consider climate change impacts when buying food. However, when asked to select their three main criteria for choosing food, respondents were most likely to select price (71%), quality (65%) and taste (59%). Animal welfare considerations were selected by 22%, while just 13% chose food for environmental reasons (organic and good for nature) and 11% because of its climate impacts. Despite this, almost half (46%) said they choose food products with environmental sustainability labels or certifications all the time, most of the time or often, with only 10% saying never.

In Germany, 49% state they have reduced their meat consumption in the last year and 29% have reduced dairy consumption, with 20% of those citing climate change as one of their top two reasons for doing so. However, German consumers' top criteria for purchasing food are quality (66%), price (64%) and taste (58%). Again, although relatively few consumers ranked environmental and climate issues in their top three criteria, 52% still regularly choose products with sustainability labels or certifications and 65% are concerned about climate change.

These findings suggest that although climate change and environmental concerns aren't the main driver of consumers' food choices, companies can utilise environmental labels to compete with comparable products.

The green claims we found, from both online and in shops, fell into three main categories: carbon neutral and other climate claims; misleading representations of food production, particularly for marketing and branding of animal products; and natural-eating and sustainable balanced diet claims. The second two categories could be described as more subtle greenwashing, but they are part of the industry's attempt to project an image and promote a narrative of animal agriculture that is greener than the reality of industrial farming systems.

⚠ Through this investigation we have identified 53 products, ads and projects, such as voluntary initiatives, that could mislead consumers when they buy food, especially meat and dairy products. Concrete examples of greenwashing in the food sector have been added to our www.greenwash.com website, which already features plastic (packaging) and fashion.

2.3 Climate labels and claims

There is a growing proliferation of labelling and certification schemes for products claiming to be carbon neutral, climate positive, net zero or similar. Companies are also increasingly using climate goals, even those in the distant future such as 2050, as a marketing tool to boost their brand's green credentials.

Carbon neutral, climate positive, carbon negative and other similar labels and claims tend to be certified via third-party organisations that run a paid-for certification scheme. Similarly, having a net-zero climate goal, approved by a third-party body such as the Science Based Targets initiative (SBTi) will often be communicated by the companies in their marketing materials. Often, companies just use the fact that they have announced a climate target in their public communications, even if the target has not yet been validated by the SBTi.[25]

Box 2.2: Putting the cart before the cow – JBS' net-zero target

JBS, a Brazilian multi-billion-dollar meat company and the world's largest meat processor, has an outsized greenhouse gas footprint: its methane emissions outpace all other companies in the sector. Our research estimated the company's emissions to be higher than the total emissions of Spain, while their methane emissions exceed the combined livestock methane emissions of France, Germany, Canada and New Zealand.[26] The company has also been linked on several occasions to illegal deforestation in the Amazon.[27]

Against all odds, in March 2021 JBS declared that it is on a path to reach net-zero emissions by 2040[28] – 10 years earlier than many of its counterparts. This announcement was met with scepticism, especially as the company has no intention to slow its rapid growth in meat production and is heavily investing in growing its processing capacity. Since the announcement, there has been little communication on specifics, timeline and how the commitments will be verified and held accountable.[29] At the time of writing, the company's plans are still under review by SBTi.

What is problematic is that although the target has yet to be approved by the SBTi, JBS has been communicating broadly about it so as to green its image among consumers. This greenwashing tactic has been called out by the National Advertising Division of the Better Business Bureau, which found the company's claims to be misleading to consumers and unsubstantiated.[30] The finding did recognize that JBS

has begun to think about its climate impact but concluded that the record did not support the broad message conveyed that JBS is currently implementing a plan to achieve its net-zero target. It was recommended that JBS discontinue making these claims.

JBS is also using its new green façade to raise capital: in mid 2021, JBS issued a sustainability-linked bond tied to its net-zero climate goals.[31] Mighty Earth, a campaigning environmental NGO based in the US, lodged a whistle-blower complaint against JBS with the US Securities and Exchange Commission. It argued that JBS' claims were fraudulent and have been misleading investors – notably because JBS has not reported its full supply chain (Scope 3) emissions, although this is where over 90% of its climate footprint lies.[32]

However, corporate climate claims have repeatedly been exposed as misleading. They routinely fail to meet key standards such as transparency and integrity or to comprehensively cover the full life cycle of a product or supply chain of a business. Additionally, the majority of climate claims rely heavily or solely on offsetting rather than emissions reductions within a company's supply chains. Climate claims from food companies are no exception.

The Corporate Climate Responsibility Monitor evaluated the transparency and integrity of 24 major global companies' climate pledges. Not a single one received a 'high integrity' score and only one received a 'reasonable integrity' score.[33] This analysis included two food companies: JBS and Nestlé.[34] JBS was found to have 'very low' transparency and integrity for its pledge to be net zero by 2040, lacking clarity around how it will reduce emissions from its largest source - cattle rearing (see box). Nestlé scored 'low' for both transparency and integrity, with its 'net zero by 2050' target relying heavily on offsetting (which it brands 'insetting') and failing to provide detailed breakdowns of emissions.

Box 2.3: **Amazon Climate Pledge Friendly**

One particularly striking example of greenwashing is Amazon's Climate Pledge Friendly range. This is a diverse collection of around 75,000 products (0.02% of all products listed on the site), including food and drinks, loosely grouped by vague sustainability claims.

Standards and labels that qualify a product as Climate Pledge Friendly include common third-party certification schemes like Rainforest Alliance, Fairtrade and Soil Association Organic as well as a number of carbon-neutral labels and Amazon's own 'Compact by Design' certification. The latter simply means some air or water has been removed from the packaging. This creates a confusing and misleading representation of what 'climate friendly' means, with a 16oz packet of beef jerky that's had some air removed from the packaging listed alongside packaging free organic shampoo bars. Beef jerky has the most negative climate impacts of any food type, which makes categorising it as 'climate friendly' on the basis of a small tweak in its packaging hugely misleading.[35] UK consumer organisation Which? has criticised Amazon's Climate Pledge Friendly range, and suggests that customers who want to find the most sustainable products on the site should bypass the Climate Pledge Friendly filter altogether and search for recognised sustainable brands.[36]

Our research indicates that the Climate Pledge Friendly label bears no relation to a product's real life-cycle environmental impact. It is emblematic of how far greenwashing has gone in the absence of regulation of corporate green claims.

In our YouGov poll, 42% of UK consumers were more likely to buy a product with a 'carbon neutral' label and 29% were willing to pay slightly or much more for those products. In Germany the picture is much the same, with 35% of consumers more likely to buy a meat or dairy product labelled 'carbon neutral' and 36% more likely to buy meat or dairy labelled 'climate positive'; 32% and 36% were willing to pay more for these labels, respectively. This confirms that there is a clear opportunity for businesses to capitalise on people's environmental concerns through greenwashing, without taking the genuine positive action for the environment.

Climate certification schemes often lack transparency and so cannot be properly monitored by independent bodies in the absence of regulation. The labels and actions taken to get the label may, in some cases, represent genuine efforts by businesses to mitigate their impact on the climate, but without independent scrutiny and regulation, it is impossible for consumers to sort the genuine from the greenwashing.

Many of the climate labels on food products are narrowly focused on certain aspects of a company or product. For example, Hello Fresh - the UK-based meal-prep delivery company - claims it is carbon neutral when, in reality, its only action is offsetting its delivery emissions. In the case of Hello Fresh, most of its emissions will be from the production of the food itself. What's more, their current business model relies single-use packaging, an issue that is not addressed at all through a carbon neutral claim or offsetting. Similarly, Nestlé, the world's largest food corporation, has heavily promoted its pledge to make KitKat carbon neutral by 2025, utilising this well-known - and previously criticised - product is a piecemeal and tokenistic approach to climate mitigation by Nestlé.[37] These approaches mislead consumers by failing to accurately represent the impact of a business or product.

Carbon neutral and similar claims are also often heavily reliant on offsetting rather than emissions reductions. Offsetting projects generate carbon credits by reducing or removing greenhouse gases, and companies buy these credits to make up for their own emissions. The idea is that a tonne of CO_2 reduced somewhere can compensate for a tonne of CO_2 emitted by the company buying the credits. However, offsetting is controversial, as it can enable companies to claim to be taking action on climate change without making any effort to reduce emissions from their own operations and supply chains. In addition, offset schemes are not well regulated and credits often represent less climate benefit than they are supposed to.

Credits: Volta Greentech

For example, in the USA Anheuser-Busch worked with Climate Neutral, a non-profit that certifies products and businesses, to claim its Bud Light NEXT beer was carbon neutral.[38] To achieve this, they measured emissions associated with the supply chain of Bud Light NEXT and bought $50,250 of carbon credits. Climate Neutral claims the companies it works with must also reduce their own emissions, but although

Anheuser-Busch has plans to reduce its emissions, no absolute reductions have been reported to date. Similarly in the UK, Climate Partner has certified a range of food companies as carbon neutral, from Candy Kittens, the confectionary company started by Jamie Laing of *Made in Chelsea* fame, to fast-food company Leon, to Benugo coffee. Climate Partner states that 'In order to make the product carbon neutral, these [life-cycle] emissions are offset through certified carbon offset projects', without obliging companies to reduce emissions in their supply chains..[39]

While projects financed through carbon credit schemes can sometimes be beneficial, the system of using them to claim emissions have been offset is hugely problematic. They have been criticised for exaggerating their climate benefits, failing to properly involve local communities, or selling carbon credits for reductions that would have happened anyway (also called a lack of additionality). A project can even, in a horrible twist of fate, be destroyed by climate-related disasters such as wildfires, causing all the stored carbon to be released again. In California, wildfires have destroyed almost all forest carbon offsets in one 100-year reserve.[40] While carbon credit certifiers claim that sufficient buffers are in place to compensate for this risk, these are unlikely to survive the test of time given the need to insure risk over more than a century. A recent investigation by the *Guardian* into Verra, the world's leading carbon offset certifier, found that their rainforest offsets used 'are largely worthless and could make global heating worse', as 90% of Verra's rainforest carbon credits do not represent real emissions reductions.[41]

We are at a point in the climate crisis where balancing the books won't cut it. This was reflected in the recent UN report *Integrity Matters*, which recommended that companies 'must prioritise urgent and deep reduction of emissions across their value chain', and that carbon credits should not be counted toward the interim emissions reductions required by their net-zero pathway.[42]

Science is clear: we need drastic cuts in emissions across all sectors. The food sector must deliver absolute emissions reductions, including significant reductions in methane emissions.

Box 2.4: **Low-methane beef**

> Consumers around the world are increasingly aware of the disproportionate environmental footprint of meat and dairy products, and of the large amount of potent methane emissions associated with the cattle sector in particular. As a result, meat and dairy producers are turning to methane-abatement strategies that would allow them to reduce the methane footprint of their cattle without having to compromise on their overall production and sales. Changing Markets' 2021 report *Blindspot* found that 11 out of 20 large meat and dairy companies had invested in methane-abatement research and technological solutions, yet none disclosed the levels of investment, raising concerns that small trials could be overinflated and used as greenwashing. The use of feed additives has been getting a lot of attention, with early findings of studies demonstrating potential in inhibiting enteric fermentation, the digestive process in cattle that produces methane.[43]
>
> This research is beginning to translate into marketable products that are likely to be labelled as 'low methane'. It's evident there is potential for companies to capitalise on this. Changing Markets' poll results found that almost a third (31%) of UK consumers and 19% of German consumers were more likely to buy meat and dairy labelled 'low methane', while 22% of UK and German consumers claimed that they were willing to pay slightly more or much more for it.

In 2022, investment in feed additives research led to commercialisation of the world's first 'low-methane beef'. LOME, sold in Sweden, is essentially meat from cows that have been fed seaweed additives, which is then sold at a small price premium (SEK 59 compared to SEK 56.5 for a comparable product).[44] According to the brand in its press statements around the launch, this feed additive can reduce daily methane emissions by as much as 90%.[45] But this is highly misleading: the feed additive was studied in just 10 cows over three months.[46] This means that the product would likely only result in small methane reductions in relation to the emissions from the cows' lifetime.

Academics who looked closer at feed additive claims found that cows emit only 11% of their lifetime methane output on feedlots – where it's easier to provide the additives. Consequently, if red seaweed reduced methane emissions by 80%, this would result in only an 8.8% reduction in total.[47] In trials of Bovaer, a methane-inhibiting feed additive, emissions were reduced by between 27% and 40% when it was added to the supplementary feed provided to grazing cows.[48] Again, however, these were short-term trials of just three months and still leave questions of scalability.

The ability of feed additives to radically reduce the sector's emissions is limited, and shouldn't be overstated based on small-scale trials. Any claims about the potential for feed additivities to reduce methane emissions need to be substantiated by scientific evidence. In the absence of such evidence, it is disingenuous to market a piece of beef as '*low methane*' so as to play on consumers' green conscience and give a false sense of security that their purchase is not contributing to heating up the planet.

2.4 Projection of sustainable farming and happy animals

'Broader, more general or absolute claims are much more likely to be inaccurate and to mislead. Terms like "green", "sustainable" or "eco-friendly", especially if used without explanation, are likely to be seen as suggesting that a product, service, process, brand or business as a whole has a positive environmental impact, or at least no adverse impact. Unless a business can prove that, it risks falling short of its legal obligations.'

CMA guidance on green claims[49]

At the heart of advertising for food, and particularly animal products, is the idea of a natural farming idyll that bears little resemblance to the production practices behind most items found on the supermarket shelves. Although these may not be explicit green claims, the recent CMA guidance also talks about implicit claims, which 'can appear in advertisements, marketing material, branding (including business and trading names), on packaging or in other information provided to consumers' and can include the images, colours and logos that are used, including any labels or certifications.[50]

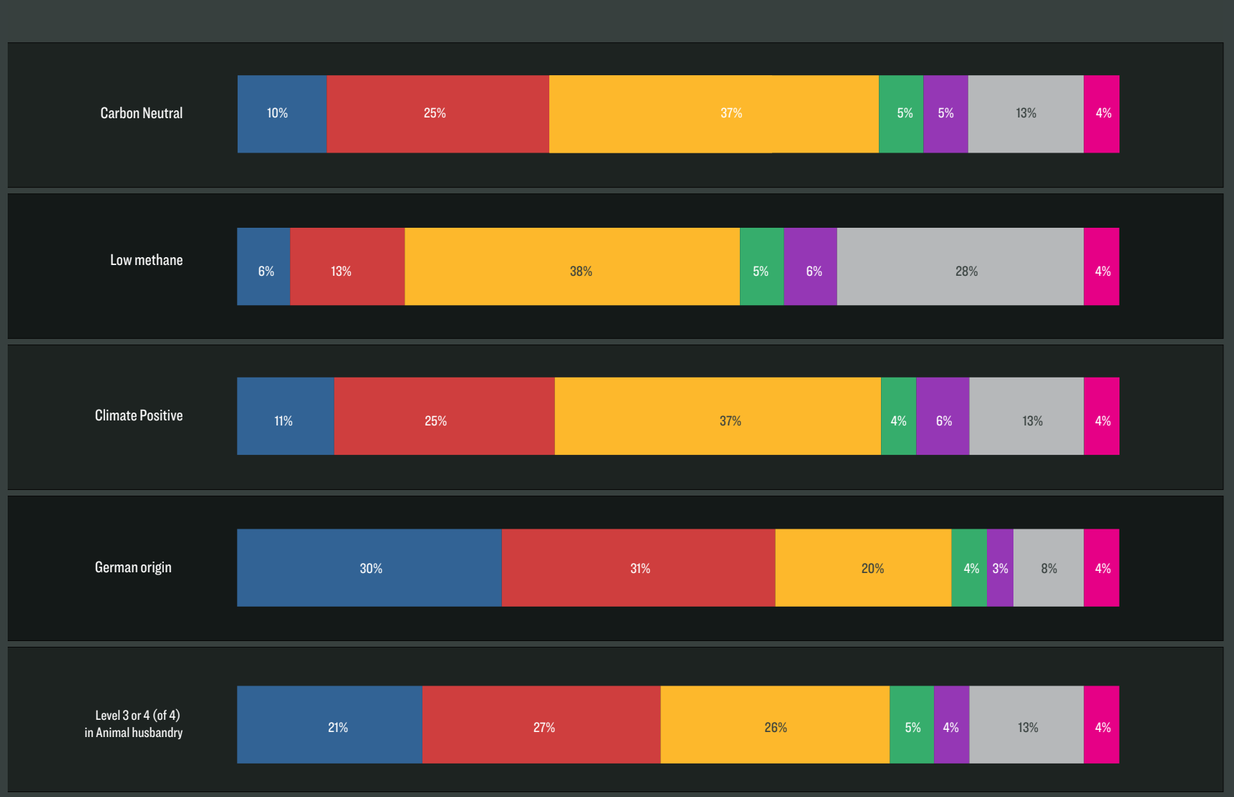
Images of vibrant green fields and happy-looking pigs, chickens and cows prevail in the mainstream media and across advertising. Vague sustainability claims on packaging and in adverts are also common, pitching meat and dairy as a solution to environmental issues - such as Cathedral City advertising 'Our Make it Better Cheddar' with images of nature, or Arla's claims to be 'building a sustainable future'.

POLLING RESULTS: **HOW MUCH MORE LIKELY CONSUMERS ARE TO BUY CERTAIN PRODUCTS DEPENDING ON THE LABELS**

GERMANY

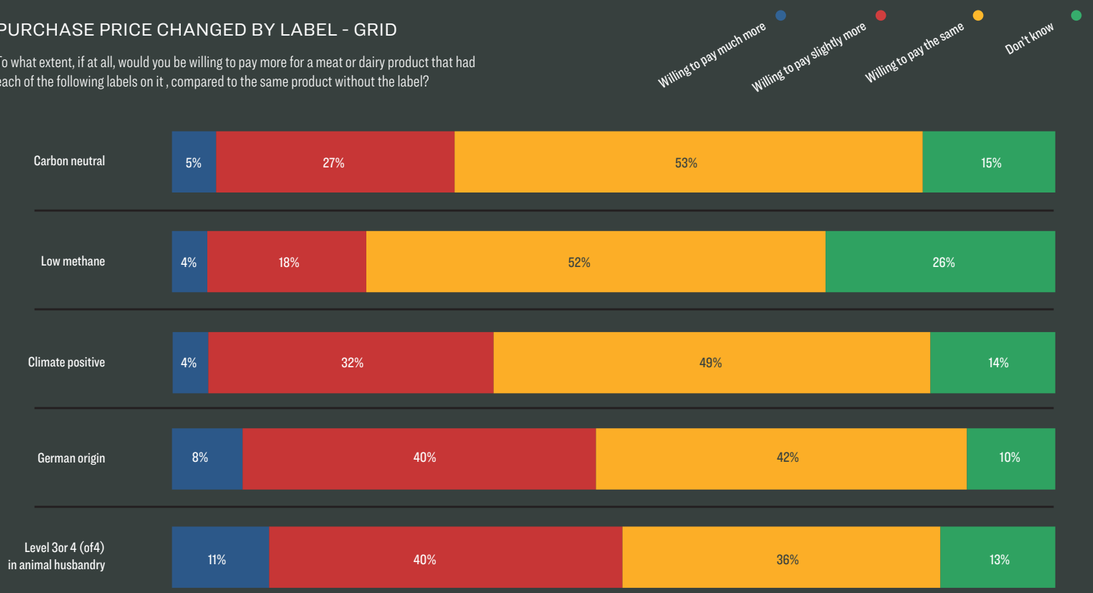
PURCHASE LIKELIHOOD CHANGED BY LABEL-GRID

To what extent, if at all, would you be more or less likely to buy a meat or dairy product that had each of the following labels on it, compared to the same products without the label?



PURCHASE PRICE CHANGED BY LABEL - GRID

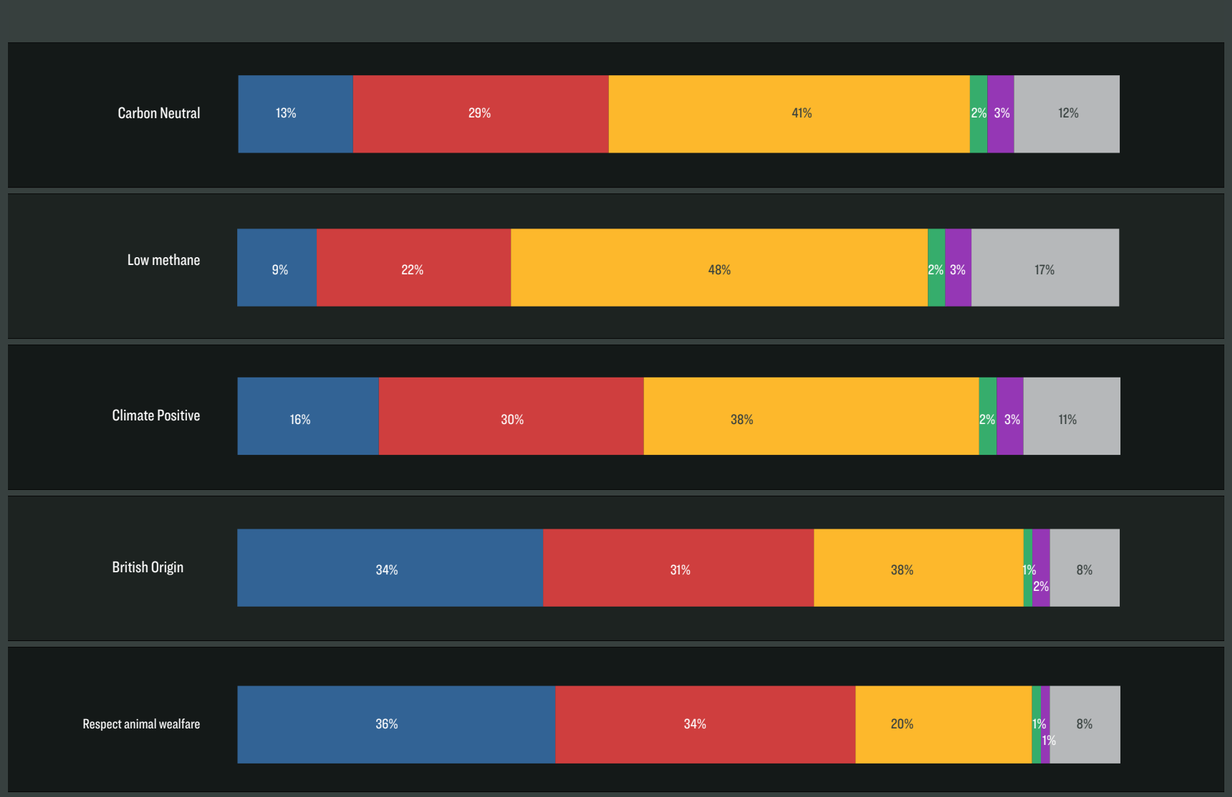
To what extent, if at all, would you be willing to pay more for a meat or dairy product that had each of the following labels on it , compared to the same product without the label?



UNITED KINGDOM

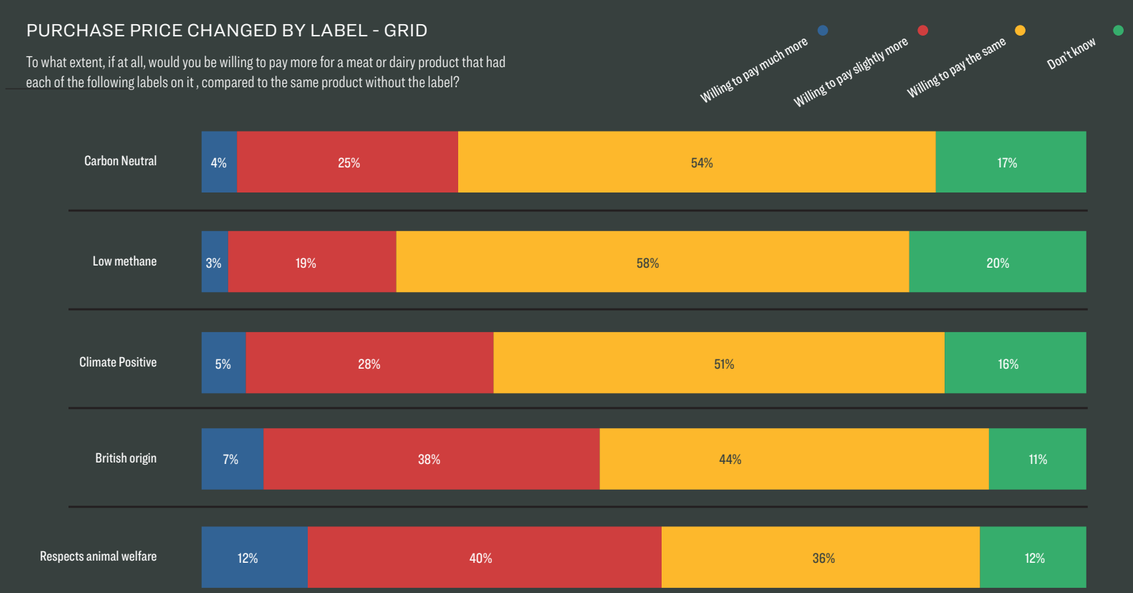
PURCHASE LIKELIHOOD CHANGED BY LABEL-GRID

To what extent, if at all, would you be more or less likely to buy a meat or dairy product that had each of the following labels on it, compared to the same products without the label?



PURCHASE PRICE CHANGED BY LABEL - GRID

To what extent, if at all, would you be willing to pay more for a meat or dairy product that had each of the following labels on it , compared to the same product without the label?



This contradicts the reality that most of the food - particularly meat and dairy - we eat comes from intensive industrial farms reliant on heavy machinery and agro-chemicals and generating significant pollution.[51] In the UK, a 2014 study found that 16% of dairy farmers kept some or all of their cows indoors all year round; by 2018 this had increased to 23% of farms.[52] In Europe, all types of animal farming have converged towards intensification, with an ever-increasing concentration of meat and dairy production in fewer and larger farms.[53] In the US, up to 99% of animals raised for food are farmed intensively.[54] The environmental consequences of this approach to food production are huge, from declining soil quality to nitrate pollution of waterways, emissions fuelling climate change to declining insect populations.[55]

Subtle greenwashing that highlights elements of a business' activities that are or appear more 'green', such as cows having some access to spacious green fields, has been termed 'green lighting'. In a report setting out 'the six shades of green', Planet Tracker describes green lighting as when 'company communications (including advertisements) spotlight a particularly green feature of its operations or products, however small, in order to draw attention away from environmentally damaging activities being conducted elsewhere'.[56]

Box 2.5: **Empty labelling: Red Tractor UK**

The Red Tractor logo is one of the most common labelling schemes in the UK, found across food products but particularly prevalent for meat and dairy products.

In a guide from Eating Better, Red Tractor consistently scored low on standards, meeting just the basic levels, except on its 'indoor enhanced welfare label'.[57] However, adverts and promotional material for Red Tractor, including those it produces with certified brands such as a promotional video with Cathedral City cheese, highlight animal welfare standards and show animals grazing in spacious fields.[58] In reality and contrary to its promotional material, Red Tractor as a whole only guarantees that farming standards meet the minimum UK legal requirements.

There have also been multiple instances of breaches where even the legal standards aren't met, from brutal cases of animal cruelty to five years of pollution from a Dairy Crest Ltd plant in Cornwall that poisoned fish in a nearby river and created odours so bad that it gave local residents headaches and sleeping and vision problems.[59]

In our poll conducted by YouGov, over half (65%) of British consumers said they would be more likely to buy a product that had a Red Tractor label and 45% were willing to pay more for a product that had a British origin label (of which Red Tractor is one). Even an empty label can influence consumer choices and their willingness to pay more for a product.

Intensive animal farming focuses on producing animal products as cheaply as possible, at the expense of animal welfare and sustainability concerns. Intensive farming jeopardises the physical and mental wellbeing of dairy cows because of long periods of confinement in indoor housing, health problems related to higher milk yields and distress caused by early separation from their calves (because dairy cows are required to give birth to one calf a year in order to produce milk for 10 months of the year, they are usually artificially inseminated within three months of giving birth).[60]

Arla Foods, which often boasts abouts its 'happy cows', acknowledges on its website that many of its dairy cows live in free-stall barns, '*free to walk around between the feeding station, the water trough, the milking parlour and their beds*'.[61] To counter mounting scientific evidence that keeping cows indoors damages their emotional wellbeing,[62] Arla launched a study of selected farms to '*give consumers confidence based on real data that cows can be healthy, happy and show natural behaviour regardless of the farming system*'.[63] But instead of being presented realistic images of intensive dairy farming, consumers are fed images focusing on the great outdoors, pastures and old-fashioned, manual farming equipment such as milk churns.

Similarly, Saputo Dairy's Cathedral City cheese and Country Life butter, both of which use images of green fields and trees and are certified by Red Tractor (see box), have been linked to deforestation in the Amazon rainforest. Cathedral City combines the green, rural scenes with empty slogans like 'make it better cheddar' and promotional videos that portray its farming techniques as expansive and grazing based. Despite these claims, the company has been accused of using soy feed linked to deforestation and received the largest fine ever for polluting a British river.[64] There is a clear choice to present farming techniques that make the company seem greener and more sustainable than it is.

This strand of greenwashing is not new, and is a more insidious misrepresentation that has been going on for decades. Some brand identities are founded on selling the idea of happy animals from extensive farms, such as The Laughing Cow cheese and Happy Eggs. The reality of the animals in the supply chains is starkly different to how the companies portray them. An investigation by PETA in the UK in 2021 found that chickens on Happy Eggs farms, for instance, were tightly packed into dark barns, many were mutilated with parts of their beaks cut off and injured or dying birds were kept with others. As PETA states: 'While the company's marketing materials depict happy hens roaming vast green fields covered with foliage and trees, PETA's footage tells a different story.'[65] These misrepresentations and branding exercises distract from the realities of the current agro-industrial system.

Although 59% of people surveyed in the UK said these images of idyllic countryside scenes do not reflect actual farming conditions, 18% are still more likely to buy products that use such images, or willing to pay more for them. Additionally, 70% of people surveyed in the UK are more likely to buy a product with animal welfare labels. Food companies clearly see these concerns as an opportunity, whether by making explicit claims or more subtly suggesting high animal welfare standards through their branding. Companies also use promotional material and labels such as Red Tractor to suggest that products of British origin follow high standards of animal welfare, which perhaps helps explain why 45% of consumers are willing to pay more for British origin products and 51% are more likely to buy a product with the Red Tractor logo.

In Germany, 69% of consumers surveyed do not believe that the images on meat and dairy products accurately reflect the farming methods used yet 27% of those still are more likely to buy a product showing animals in an open field or other outdoor farming methods, or willing to pay more for these - even if these have no relation to reality.

2.5 Natural-eating claims

The final common category of greenwashing on food is the natural-eating mirage. Again, this approach is often used by meat and dairy companies, focusing on the

role their products take in a 'naturally' balanced diet. However, these claims are often being made in countries that over-consume meat and dairy products and where production is intensive, not 'natural'. Combining 'natural' claims with green imagery suggests products are sustainable, which in many cases is a misrepresentation of the reality.

Claims about 'natural health' benefits made in adverts for or labels on meat and dairy products tend to be based on physical characteristics of animal protein, but are presented as nutritional guidance. Such claims build on the 'protein myth', a name given to the focus on high protein intake in the Global North, when in fact studies show that wealthy countries consume too much protein - which can itself pose health risks.[66] Additionally, this type of messaging does not differentiate between types of meat products, including processed animal products containing potentially harmful additives like nitrates and too much salt within ideas of a healthy balanced diet. By combining images of nature with empty statements like 'natural goodness', marketing by meat and dairy companies suggests their products come from nature and are intrinsic to a healthy diet.

Meat and dairy adverts often focus on children being active in nature and those products being 'naturally' beneficial for children's development. For example, the Agriculture and Horticulture Development Board's 'We Eat Balanced' campaign shows a young girl running through fields before drinking a glass of milk and eating red meat with claims like 'meat and dairy naturally contain vitamin B12'. These types of adverts do not include caveats about healthy levels of meat and dairy consumption.

Legal evidence recently unsealed from a 2016 case in the USA showed that meat-packers were purposefully capitalising on consumer interest in healthy and organic food by marketing their products as 'natural' or 'artisanal'.[67] Additionally, a study of US consumers in 2015 found confusion between food products labelled 'natural' and 'organic', despite the fact organic products are officially certified and regulated whereas 'natural' is an undefined and potentially misleading marketing term.[68] Some companies and product ranges have developed their branding on this: for example, Heinz by Nature is a baby food range that doesn't contain artificial ingredients but has no organic or sustainability certifications.

3. Conclusion and recommendations

3.1 Conclusion

This briefing has offered an insight into some of the ways in which more or less subtle greenwashing is happening in the food industry. Our investigation discovered an array of green claims that are being placed even on the most carbon-intensive food products, such as beef. We have uncovered greenwashing advertisements by companies that are responsible for outsized greenhouse gas emissions, and industry initiatives designed to distract from the real environmental impact of animal agriculture and to delay or derail policy actions that are so desperately needed in this sector. Over 80% of all 53 claims

Credits: Krasten Wurth, Unsplash

found through our investigation were related to climate, with more than half of those explicitly relying on offsetting and the rest focusing on emissions intensity for products or emissions reductions for small, select parts of their supply chain like transport.

Despite a scientific consensus that beef is the most carbon-intensive type of food, our investigation found beef products that were labelled as ‘climate positive’ (by Hipp), ‘net zero’ (by New Zealand’s largest meat processing company, Silver Fern Farms), ‘low methane’ (by Coop, the third largest Swedish retailer) or included in Amazon’s Climate Pledge Friendly range just because the company removed air from the packaging. Examples of ads include Burger King’s reduced methane Whooper ad, which claimed - on the basis of an unfinished study - that feeding lemongrass to cows would reduce methane emissions by a third.[69] The ad was later removed following a backlash from farmers and scientists. Our research also revealed six industry initiatives that aimed to distract from the real environmental impact of the meat and dairy sector including the AHDB ‘We Eat Balanced’ campaign in the UK.

In the dairy category the investigation found products that claim to be carbon neutral (by Arla and Danone), ‘carbon zero’ (by Fonterra) or under a carbon neutral pledge (cheddar by Lidl). We also discovered lots of dairy products with vague claims such as ‘planet-friendly’ and ‘sustainable future’ accompanied by images suggesting that cows are permanently grazing in the fields - which in most cases was not proven. Some ‘carbon neutral’ or ‘sustainable’ labels on dairy products in fact referred only to the packaging - and even the packaging in question, cartons, are not always recycled because of a complex material mix.

Even pets cannot escape greenwashing, as the investigation discovered ‘carbon negative’ pet food by Wagg, which contained chicken. But the subtle greenwashing was especially prevalent in the children’s food section, where images of nature and claims like ‘nothing artificial’ abound.

Across both the UK and Germany, almost half (49%) of people surveyed by YouGov for Changing Markets regularly choose products with environmental sustainability labels or certifications and many are willing to pay more for them. These consumers are interested in sustainable purchasing options and on average 35% are willing to pay more for climate and animal welfare labels. Yet, at the same time, they are concerned about corporate greenwashing (59%) and have particularly low levels of trust in sustainability claims about meat and dairy products - on average around 15% across different sources such as supermarkets and third party labelling.

Interestingly, during the time of writing of this report, McKinsey and NielsenIQ published a study that examined the growth of products that claim to be environmentally and socially responsible in the US market over the last five years. Consumers overwhelmingly respond positively when asked if they care about buying environmentally and ethically sustainable products, but this is one of the few studies that has looked at their actual spending behaviour. The study showed that products that had some claims averaged 28% cumulative growth over the past five-year period, while products that made no claims had 20% growth. This trend was even more accentuated with products making multiple claims, which grew twice as fast as products making just one claim. The study confirms that consumers are backing their stated preferences with their actual purchasing behaviour.[70]

This shows the financial consequences of greenwashing. If the claims are not genuine, consumers are being misled, while businesses that are genuinely investing in the green transition are being financially disadvantaged. It is urgent that regulators start taking a closer look at food products and companies, regulate green claims and ensure these rules are properly enforced across the market.

Box 3.6: **Green claims without the greenwashing**

Provamel, an organic, plant-based company that sells non-dairy milks and yoghurts operating in the EU and UK, offers a sustainability statement that provides more transparency and reality than most.

When referring to its previous approach of carbon 'compensation' – essentially a tree-planting offsetting approach – Provamel states: 'We did this because we believed that we could create products without adding CO_2 to the atmosphere. We now realize this might not be the best way to handle things: we still have emissions, so our first goal should be to reduce them at their roots as much as we can (rather than offsetting them).'

As a company, Provamel has decided not to go for the glossy label of 'carbon neutrality' and instead focuses on reducing its emissions by 'investing in energy efficiency and green electricity'. It has made constant improvement central to its corporate identity. Provamel continues to fund tree-planting but 'no longer for the sake of offsetting': instead, it recognises that its business generates emissions and that working to reduce these is paramount. While tree-planting is a positive action Provamel funds in and of itself, it recognises it shouldn't factor into the emissions calculations for its products.

There is still room for improvement though. Firstly, the company measures its success based on emissions per product (emissions intensity) instead of absolute emissions. Absolute emissions is an essential measurement as it considers the overall impact a company is having. As a company that specialises in plant-based milk, Provamel may well expect to grow in the future, which would entail emissions – albeit less than an equivalent dairy company would produce. To communicate this, the company could present its emissions reductions per product alongside transparent information about emissions from growing the business.

Secondly, its products are packaged in hard-to-recycle or unrecyclable materials such as cartons and plastic pots and tubs with film lids. Investing in reuse models and supporting progressive government legislation on recycling systems would show the company acknowledges and wants to minimise the impact of its single use packaging.

3.2 Recommendations for Governments

3.2.1. Regulating green claims

As this briefing demonstrates, there is a crucial need for further regulation on green claims made by companies. Policymakers must establish rules on what companies can or cannot claim, how these claims should be communicated and under what conditions. Countries in Europe are in the process of establishing further restrictions that would regulate environmental claims and labels to protect consumers against greenwashing. In February 2023, the UK Committee of Advertising Practice and the Broadcast Committee of Advertising Practice updated their advertising guidance to include guidance on the use of carbon-neutral and net-zero claims in advertising, reflecting key principles of the CMA guidance on environmental claims.[71] The CMA has recently announced that it will scrutinise green claims around the sales of household products - a category that includes food and drinks.[72] The Digital Markets, Competition and Consumer Bill, introduced in spring 2023, will give the CMA powers to impose penalties on companies for misleading green claims.[73] These penalties should be strong enough to serve as a deterrent to companies looking to use unsubstantiated or misleading claims to make them or their products and services seem sustainable.

The EU is pushing two directives to establish a regime strengthening consumer protection against greenwashing. On 30 March 2022, the European Commission published a proposal for a 'Directive for empowering consumers for the green transition', through better information and protection against unfair practices.[74] This regulation has a wide remit: it creates a set of rules covering aspects such as eco-labels, green claims, premature obsolescence, and contractual information to be provided to consumers. In addition, the Commission is due to publish its 'Directive on green claims' in March 2023, which will specify how EU Member States are to make sure that green claims are substantiated by a principle.

At a minimum, the two directives should together:

Ban outright generic climate claims. As our briefing demonstrated, 'carbon-neutral' claims are particularly widespread. Such claims are highly misleading as in many cases they imply no impact on the environment. Meat and dairy products are the most carbon-intensive food products, so claiming that these are carbon neutral or 'low carbon' is highly misleading. These claims, alongside similar claims such as 'climate positive' or 'carbon negative', that rely on claiming emissions have been offset, should be explicitly banned.

Implement further restrictions on claims based on future environmental performance (such as 'net zero by 2050') and ban those based on offsetting.

Ensure that green claims are substantiated by robust and harmonised methodologies based on scientific evidence, considering the full life cycle of the products and all their potential impacts. The European Commission is considering obliging companies to use the Product Environmental Footprint (PEF) method or similar scientifically robust full life-cycle method. However, as this methodology for some products does not cover all the impacts, the future directive should instruct companies to also add environmental impacts that fall outside the scope of the PEF.[75]

Require certification schemes to be pre-approved by national authorities and strengthen independent verification processes, including transparency and necessity for continuous improvement.

Ensure that governments set up regular monitoring and enforcement from relevant national authorities with sufficient penalties to protect consumers from misleading green claims and other companies from unfair competition.

3.2.2. Addressing the climate impact of the food sector

While our polling results show that consumers in the UK and Germany are concerned about the climate and willing to choose and pay more for climate-friendly products, they still consider quality (65%), price (68%) and taste (58%) as more important criteria when buying food. However, climate and environmental emergencies are real and already affecting food production systems everywhere. If the temperatures increase beyond safe levels and tipping points are reached, scientists predict that more than a third of existing areas for crop and livestock production will become unsuitable by the end of the century.[76] Governments need to act through climate legislation and fiscal policies to drive the transformation of the food system.

This includes:

- *Set binding greenhouse gas reduction targets, including methane, for the agriculture sector in line with the global goal of limiting temperature increase to 1.5°C.*

- *Require companies to consistently and comprehensively report their greenhouse gas emissions, including scope 3, and set emission-reduction targets in line with*

science, including a system of independent third-party verification. Methane, nitrous oxide and carbon dioxide emissions must be reported separately.

- *Enact a phased transition for farms to reduce animal numbers in line with a just transition principle for the transformation of the animal agriculture sector.*

- *Regulate all pollutants (besides methane) from mass industrial meat and dairy production to facilitate a transition from this model of animal agriculture towards agroecology.*

- *Reform agriculture policy (the EU Common Agricultural Policy, the US Farm Bill, etc.) to support higher environmental and social outcomes and drive an agroecological transformation of the sector, away from massive industrial animal farming production towards a system that respects animal welfare, planetary boundaries and people. This should be accompanied by facilitating a shift away from a food system dependent on overly abundant animal protein toward increased consumption of plant-based foods. This includes removing subsidies for mass production of feed grains and making farm support dependent on positive environmental and social outcomes.*

3.3 Recommendations for companies:

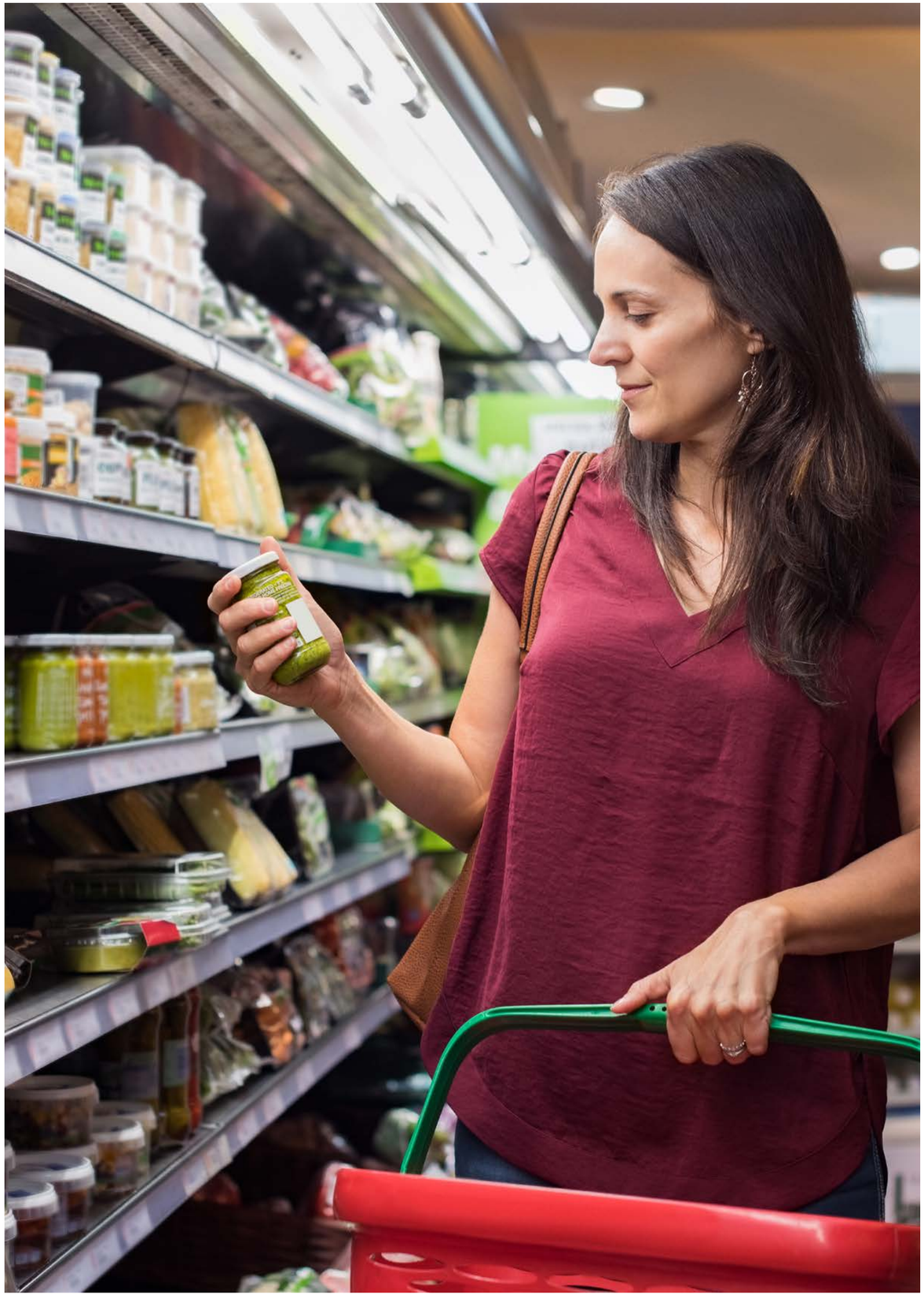
- *Set emissions reduction targets and action plans in line with the global goal of limiting temperature increase to 1.5°C. The focus must be on reducing the company's absolute emissions, rather than emissions intensity, including scope 3 emissions. Companies should also include transparent reporting, including slaughter numbers and milk intake, to enable independent verification of their climate-related disclosures.*

- *Establish separate methane reduction targets and action plans to meet them, including separate reporting of methane emissions. Reporting should also include disclosure of investments in climate mitigation and adaptation measures.*

- *Reduce the number of animals in global supply chains and create a just transition plan with farmers and workers in your global supply chains.*

- *Support progressive climate, environmental and health policies that will drive a shift to healthier and more environmentally sustainable diets.*

Companies should support governments in creating these strong regulations. It is in the interest of a whole sector to create a level playing field, rather than letting companies with fancier greenwashing tactics and marketing win market share through misleading consumers. As recommended in the UN report, Integrity matters, companies must also "align their external policy and engagement efforts, including membership in trade associations, to the goal of reducing global emissions by at least 50% by 2030 and reaching net zero by 2050. This means lobbying for positive climate action and not lobbying against it."[77]



Credits: Shutterstock

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